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MATERIAL CULTURE

An inquiry into the meanings of artefacts

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To the memory of my father

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Summary

The main purpose of the following inquiry is to emphasise the importance of a phenomenon long neglected by the majority of the human sciences, the artefact; each one of us, no matter what age, sex or culture, is in contact with artefacts every moment of our lives yet despite this they have received scant attention. The study begins by outlining a definition of the artefact, highlighting those characteristics which, in combination, ensure its centrality to social life before, through a discussion of Popper's ideas, proceeding to see how material culture can be conceptualised as meaningful. In order to understand how meaning becomes attached to the artefact the notion of objectification will be analysed and, consequently, so shall the importance of both the type of activity and the physical nature of the materials involved in the artefact's production. Picking up on the theme of materiality this aspect of material culture will be shown to pose major problems to any interpretation of the artefact along semiological lines; language and material culture are evinced to possess fundamentally distinct characteristics which make comparisons between them far from straightforward. These differences will be analysed further, concentrating specifically on the role of context in the establishment of meaning. This leads on to the proposal that our understanding of artefacts can occur on three levels; three forms of knowledge are thus described of which a linguistically formulated type constitutes just one kind. The penultimate chapter tackles the ways in which artefacts affect us, how they are active elements in our relationships with them; therefore, a dialectical position is postulated in which both artefacts and agents take part. Finally, the study concludes by stressing some of its wider implications and suggests a few of the practical situations to which it can be applied.

The elder Heyst had left behind him a little money and a certain quantity of movable objects, such as books, tables, chairs, and pictures, which might have complained of heartless desertion after many years of faithful service; for there is a soul in things.

Joseph Conrad, *Victory*

Why can't office buildings use doorknobs that are truly knob-like in shape? What is this static modernism that architects of the second tier have imposed on us: steel half-U handles or lathed objects shaped like superdomes, instead of brass, porcelain, or glass knobs? The upstairs doorknobs in the house I grew up in were made of faceted glass. As you extended your fingers to open a door, a cloud of flesh-colour would diffuse into the glass from the opposite direction. The knobs were loosely seated in their latch mechanism, and heavy, and the combination of solidity and laxness made for a multiply staged experience as you tuned the knob: a smoothness that held intermediary tumblers into position. Few American products recently have been able to capture that same knuckly, orthopaedic quality (the quality of bendable straws) in their switches and latches; the Japanese do it very well, though: they can get a turn-signal switch in a car or a volume knob on a stereo to feel resistant and substantial and *worn into place* - think of the very fine Toyota turn-signal switches, to the left of the steering wheel, which move in their sockets like chicken drumsticks: they feel as if they were designed with living elbow cartilage as their inspiration.

Nicholson Baker, *The Mezzanine*

Introduction

The forgotten artefact

It has been noted by one commentator that “the focus of intellectual work in the human sciences in the second half of the twentieth century has been a theme of culture”, what Chaney designates ‘the cultural turn’ (Chaney 1994: 1). For the most part, culture in this context has been conceptualised primarily along idealistic lines; that is, it has been perceived as the ‘world of ideas’, as essentially that part of social life consisting of beliefs, values, ideologies, patterns of thought, etc. which are shared by a specific group and through which their understanding of the world is formed. Many of these elements are, of course, expressed materially, they are made concrete by being written, printed, represented in art and architecture, embodied in consumer products, etc. - they come to constitute material culture. The analysis of this particular field within cultural studies has seen a recent growth, yet, strangely, there seems to exist an apparent reluctance to consider in any detail its distinguishing characteristic.

its physicality. Material culture studies have concentrated almost entirely on its cultural aspects and, concomitantly, to all intents and purposes, ignored the material aspects of this phenomenon. As Carlstein points out:

“Social scientists have commonly refused to see ‘dead things’ as social or have left them aside for the natural scientists. Social scientists have commonly refused to look upon artefacts as social in the sense that they impinge on how individuals interact with one another. These ‘dead things’ are, at best, seen as symbols and are not considered to be genuine ingredients in social situations and processes” (Carlstein 1982: 8-9).

The main purpose of the following study is to redress this situation, to suggest that any theory of society which ignores the artefact is necessarily incomplete. To support such a position the importance of the artefact in social life will need to be established, consequently we will not be so much concerned with a decentring of the subject as a centring of the object, material cultural items are to be conceived as fundamental to human being.

Now, on one level this appears a rather obvious point to make, we and our ancestors have for the past two to three million years become increasingly dependent upon technological innovations for our existence - tools, clothes, equipment of all kinds have helped ameliorate the hardships we encounter every day. As such artefacts can

be seen to play an essential role in everyone's lives, but this utilitarian aspect of material culture is only one among many, our relations with artefacts is multifaceted. The word 'relations' is used intentionally, because artefacts are not just objects which we employ, merely devices we apply in particular circumstances, for this implies that we are the only active participants in these events, artefacts thus remaining passive things completely subject to the whims of their operators. In opposition to this assumption it will be proposed that there exists a dialectic relationship between artefacts and people in which both have the capacity to act upon the other in a variety of manners. On the one hand, we shall see that we understand and manipulate artefacts in different ways, from one that is essentially contemplative and reflective in nature to one that is habitual and embodied, but still meaningful. On the other hand, material culture will be shown to affect humanity through a number of means which emanate from both its physical nature and its place within a context.

Specific attention will be given to the physicality of the artefact for, as we have just noted, it is this aspect of material culture which has suffered the most disregard, yet brings with it some of the most significant repercussions. Some of these implications raise serious problems for any attempt to interpret the artefact semiotically, a method often used by those who concentrate on the cultural aspect to the detriment of the material. Major difficulties emerge relating to the physicality of artefacts which make the comparison between them and language questionable on a number of levels; therefore, while not denying that objects can act symbolically, material culture cannot

be seen purely as a realm of signs to be decoded, it has a far more complicated nature which negates such an approach.

Another area of inquiry which this study touches upon is the recently emerging sociology of the body; here too there seems to be an apparent lack of understanding of how the artefact affects the human body. One of the first theorists to explore this topic was Marcel Mauss who coined the term 'techniques of the body', a phrase which relates to his observations that different cultures often possess different styles of bodily movement, e.g. particular styles of walking. He also noted how technological devices affect these movements, e.g. how shoes affect gait, how the shape of a spade affects the motions of digging. It is this factor which appears to have slipped from view, how we as physical beings *interact* with other physical things, things which are often the products of other people. Overall, therefore, the artefact will be shown to constitute a crucial aspect of human social life and, hence, something which needs to be more fully comprehended if we are to gain anything like a proper understanding of our activity in the world.

Towards a definition of the artefact

Before launching into this study of the artefact we must first come to some kind of understanding, however preliminary, of what we will be dealing with, what in fact is an artefact? Of all the disciplines that confront artefacts as part of their regular activity archaeology appears to be the one most heavily reliant on their analysis as they constitute one of the few remaining sources of evidence relating to past societies. In their introductory work to this field Renfrew and Bahn provide a good starting-point for us when they define artefacts as “humanly made or modified portable objects” (Renfrew & Bahn 1991: 41). This definition contains three crucial elements, each of which need to be addressed. Firstly, artefacts are distinguished from all other material objects by the fact that their final form is the result of human agency. Secondly, larger, immobile structures like houses and bridges are excluded from this class due mainly to their size. Finally, artefacts are different from other products of human agency, such as social systems and institutions, in that they are material, they have a physical presence.

Artefacts as human products

Our investigation into the first defining aspect of an artefact, its formation through human activity, entails a number of wide-ranging features and the analysis of each of them will, together, form a substantial part of the following work. At this early stage, however, it would be helpful to emphasise a few basic points in order to orientate ourselves. Foremost amongst these is the notion that, in the words of Shanks and Tilley,

“inert matter is transformed by social practices or productive labour into a cultural object, be it a product for immediate consumption, a tool or a work of art. Objectification - the serial transformation of matter into a cultural object - is the inevitable consequence attached to and flowing from labour. The image of humanity inscribed in material culture is, of course, not a phenomenal image of the self but of the powers involved in the transformative social practice. The practice of individuals is ‘written’ and imprinted in the world leaving traces of varying degrees of solidity, opacity or permanence - material culture. Every act of social production is always one involving an interconnection between inert materiality, consciousness, action and thought. If there were no teleological positing on the part of the agents there would be no material culture. Material culture results from a productive process and as a production it is the result of purposeful activity: it bears the indelible stamp of the positioned subject, positioned in relation to social structures and social strategies. The

social labour congealed in the object is inherently meaningful labour, labour which takes place in relation to a symbolically constructed social field” (Shanks & Tilley 1994: 130-1).

That artefacts are meaningful is a sentiment also espoused by Max Weber. As is well known Weber’s sociology was centred around the interpretation of meaningful social action, and, being a result of such action, human products are not excluded from his work, they too are open to interpretation. Weber states his position thus,

“every artefact (e.g. a machine) has a meaning which can be interpreted and understood purely because of its having been produced by human beings and used in human activities (possibly for very different purposes); and unless this meaning is taken into account, the use of the artefact remains totally unintelligible. It is intelligible therefore in virtue of its relationship with human action, either as a means to some end or as an end in itself, which a certain agent or agents had in mind and to which their action was directed” (Weber 1991: 10).

Such a statement implies a universal conception of human nature which is not acceptable to all; however, with respect to our interactions with artefacts this position will be endorsed and substantiated throughout this study. The same applies to another moot point inferred in the above quote; that which distinguishes artefacts from natural objects is the fact that the former are meaningful in two respects. That is, artefacts are

meaningful as a consequence of their being the products of human activity and because further meanings can be given to them by those encountering them subsequently. Natural objects acquire meaning only through the latter process. The importance of this dual aspect of meaningfulness will require a great deal of elaboration. Surprisingly, little systematic attention has been given to these unique qualities which artefacts possess therefore our approach will be fairly eclectic, drawing upon a number of traditions including architecture, linguistics, archaeology, social theory, anthropology, philosophy and aesthetics.

Portability

The second defining feature mentioned above basically refers to the size of the human product, limiting artefacts to those objects which can be easily manipulated and transported without too much effort by one or a couple of people. Few, if any, consequences result purely from this quality. For example, both natural and human-made objects that are portable can be grasped, collected, hidden, thrown, swallowed, etc., whilst size does not restrict things from being given, struck, exchanged, possessed, destroyed, etc. It is in combination with the other two factors that distinctive qualities emerge, a good example being money tokens.

Material objects

The final aspect implied in the above definition is the material nature of the artefact and here again we come across a lacuna for, despite the pervasive presence of physical objects in everyday life both natural and artificial, a paucity of work has been undertaken with respect to the attribute of materiality. As Daniel Miller rightfully points out,

“in philosophy ... there are numerous discussions of objects which refer to some observed attribute or perceptual property pertaining to things as such, but books with titles such as *Words and Things* will be found to have very little to say about the social implications of things as objects, while having plenty to contribute to an understanding of the nature of words. Political philosophy is more concerned with objects as properties than the properties of objects, while phenomenology, as that branch of philosophy which claims more direct concern with everyday objects, considers these mainly as media for addressing the role of agency and the nature of subjectivity” (Miller 1993: 85).

It may, therefore, be helpful to spend some time on discussing the qualities that result from the material nature of physical objects at a general level including, for the time being, both natural and artificial items.

The first obvious characteristic possessed by material objects is that they are composed of matter, they have a physical nature and as such they can be said to be solid. However, whereas the distinction between an object either possessing matter or not is absolute, there are degrees of solidity, a quality which is dependent upon the nature of the material or materials which constitute it. Solidity, or hardness, is an emergent property not so much of matter itself, but of the way in which matter is assembled and the external conditions present. Therefore, an object fashioned out of iron owes its solidity to factors such as temperature and pressure. The self-same iron object under different conditions can become molten, fluid, losing both its solidity and, therefore, its object-like character. Two concomitant results follow on from this state of affairs. Firstly, two solid material objects can never occupy the same space simultaneously - I cannot sit in exactly the same position as you are sitting at this moment in time. Secondly, in normal circumstances solid objects retain their individual identity as the possibility of merger is denied. A quantity of metal coins gathered together remain a collection of individual items whereas a water droplet added to cup of water immediately becomes 'lost'. This quality also ensures that, instead of us having a ghost-like existence on earth, we can pick up, hold, manipulate and carry material objects. Another consequence of the solidity of an object is that it can effect other objects. When two such objects meet, because they cannot combine, a number of possible results can ensue to one or both of them including damage, destruction, modification or just a change of direction as in the case of billiard balls.

An associated fact is that only through the application of material objects can we alter the material world, (and we must keep in mind that we too are physical beings).

The second characteristic allied to material objects is that they exist through time, they are, thanks to their physical character, durable. The nature of this quality is dependent upon both internal and external factors. With respect to the former, we can make a distinction between organic and inorganic objects each of which have their own specific consequences. Living organisms have a finite existence, the amount of time that they are present on earth is limited. During their lifetime their continued presence as a single organism is due to a perpetual process of regeneration as new cells replace old, therefore they are and they are not the same living 'thing' over time. Some organic matter can, of course, exist for many years after its death through both natural and artificial processes. Wood, for instance, can be preserved naturally for thousands of years in a transformed state as coal or in a recognisably 'wooden' state for hundreds of years if certain extreme conditions pertain which prevent decay. Similar results can be achieved by human activity either intentionally, through such techniques as freeze drying, or unintentionally as in the case of the Neolithic timber trackways in the Somerset Levels. The make-up of inorganic matter usually entails that objects consisting of such substances are relatively more durable than their organic counterparts. It is due to this fact that we have some knowledge of our remote ancestors in the form of stone flack and pebble tools dating back between two and two and a half million years, (unfortunately wooden implements, which in all

probability predated these stone objects, have not to our knowledge survived). The durability of material objects affects our behaviour towards them. Our dealings with a bag of mushrooms, for example, are determined by the fact that they will be useless a day or two after purchase, whereas no such concern is needed with respect to a spoon. This also highlights another distinction pertaining to the human world: the presence of many material objects is dependent upon whether they are items for consumption or use. A proper end for the bag of mushrooms is in my consumption of them in an omelette, they thus cease to exist. A spoon, however, can be used on a multitude of occasions, its presence remains little affected by our use of it, it cannot be consumed and this therefore ensures its durability. Another feature allied to the material objects continuation through time is that this can occur quite apart from our knowledge of it, it can exist independently of human consciousness. If I put down my pen on the desk it does not disappear the moment I leave the room and then reappear when I return - material objects have an autonomous existence.

A third characteristic of material objects is that they are three-dimensional, they possess height, width and depth. Consequently, material objects have an external observable boundary or surface and a, usually hidden, interior. It was this attribute of three-dimensionality that was of great interest to the Cubists and to capture it on a two-dimensional surface meant the rejection of the one-point perspective approach employed since the Renaissance. The Cubists realised that our understanding of the world is not one formed out of numerous 'snap-shots'; we are forever in motion,

perpetually viewing objects from different angles so that our experiences possess aspects of depth and movement. To highlight these qualities such artists concentrated on the still-life, paintings of everyday mass-produced objects in particular. Picasso and Braque especially concerned themselves with these items going so far as to incorporate them within their collages. Another aspect of an object's three-dimensionality is that, as well as allowing it to be seen from many view-points by an individual, it also allows it to be experienced by a number of people simultaneously. This, it could be argued, constitutes a further distinct characteristic of material objects. As such it can be said that we occupy a world of common objects and thus similar experiences, we have a shared and thus social existence.

These are, then, the four basic or primary characteristics that transpire as an inevitable consequence of an object's materiality, they are always and ever present and together they help to define its essential nature. However, in themselves they do not add up to a complete definition as qualities like texture, elasticity, smell, solubility, colour, temperature and fragility are excluded. Some of these, particularly texture and temperature, are universal properties, but, like the other 'secondary' incidental features, are not of such great consequence. Now all these characteristics, both primary and secondary, can be divided along different lines, into categorical properties and dispositional. The first set contains all those properties that are immediately apparent and therefore unconditional, for example shape, size and

colour. The latter set, on the other hand, include properties which are conditional and need never become manifest, for example fragility, texture and solubility.

Conclusion

Hopefully, these brief notes towards the definition of the artefact have helped us to gain our bearings for the forthcoming study, we now have some understanding of what an artefact is. One is immediately struck by the thought that such a seemingly humble object is in fact quite complex. The following work will attempt to unpack this complexity and tease out the ensuing implications. The justification for a task of this nature lies in the importance artefacts have for all of us in our everyday life; we are both continually surrounded by them and spend much of our time interacting with them. Consequently, it could be argued that artefacts, if adequately interpreted, can offer an insight into our social existence. Yet this possibility need not just be seen as applicable to contemporary circumstances; because of their capacity to exist over long periods of time the same principle can be applied to societies of the distant past - in fact, artefacts often constitute a major part of the surviving evidence of such societies and therefore offer one of the few channels of inquiry. The following section will be preoccupied chiefly with assessing the way in which information can be said to be embedded within the artefact, how knowledge can take on material form. To achieve

this we shall begin by appraising the work of a philosopher whose work is often not associated with the analysis of material culture, Karl Popper.

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Material Knowledge

Introduction

The intention of the following section is twofold. Firstly, it is to argue that all physical products resulting from human activity necessarily ‘carry’ information; and secondly, it will propose some preliminary points concerning the actual nature of this particular type of information. There has been a surprising neglect of these issues, surprising because in essence they are central, or important, to a number of related disciplines, i.e. archaeology, anthropology and sociology. Consequently, this chapter will begin in the realm of philosophy, more specifically with the work of Karl Popper. The almost total neglect of Popper’s thoughts by those interested in cultural theory appears to be rather unusual, for, at the core of his thoughts lies a novel and explicit conceptualisation of an ideational realm, an element of which refers explicitly to material objects. Through an analysis of Popper’s work in this area a firmer footing for a theoretical understanding of material culture will hopefully emerge. This preliminary task of arguing for the possibility of information somehow residing in

physical objects is one that is not usually tackled, but is often taken as given. Such assumptions can lead to an unthinking acceptance of theoretical standpoints which have questionable foundations, the following section is an attempt to avoid this situation.

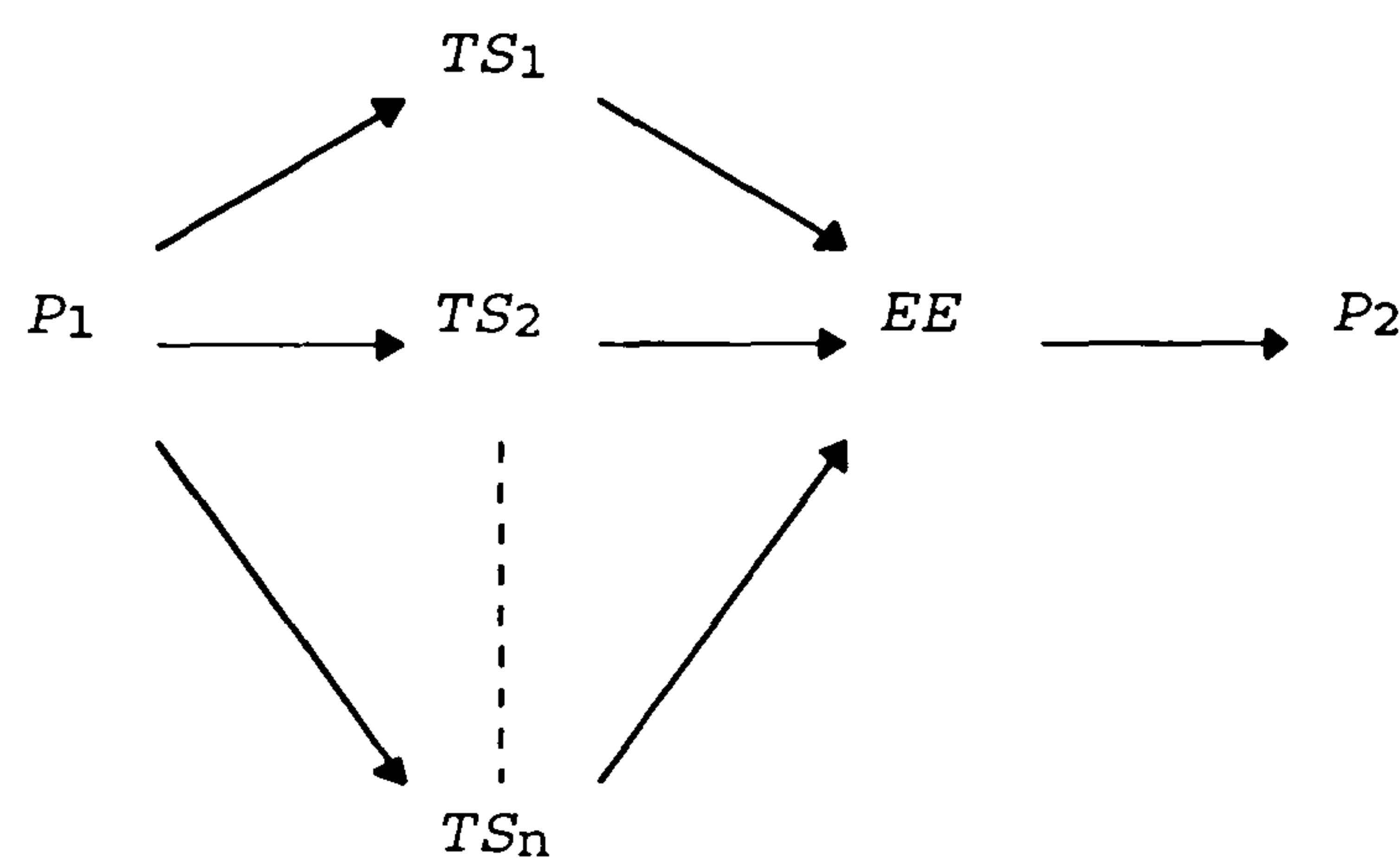
Popper's three worlds

Let's begin, then, by gaining some kind of understanding of Popper's idiosyncratic work. According to this realist approach there exist three ontologically discrete worlds that he describes in a number of his papers. These entities he defines thus: "first, the world of physical objects or of physical states; secondly, the world of states of consciousness, or of mental states, or perhaps of behavioural dispositions to act; and thirdly, the world of *objective contents of thought*, especially of scientific and poetic thoughts and of works of art" (Popper 1992: 106). Popper is well aware that this is a contentious scheme, especially his distinction between world two and three phenomena, yet this stance is entirely necessary in order to support a formulation of an evolutionary epistemology with the commensurate notion of objective knowledge.

For Popper all knowledge is open to growth, consisting "in the improvement of existing knowledge which is changed in the hope of approaching nearer the truth"

(ibid: 71). This development is the result of a process analogous to Darwinian evolutionism, what Popper calls “the natural selection of hypotheses” (ibid: 261). Therefore; “our knowledge consists, at every moment, of those hypotheses which have shown their (comparative) fitness by surviving so far in their struggle for existence; a competitive struggle which eliminates those hypotheses which are unfit” (ibid: 261). He portrays this whole process schematically;

“Using ‘*P*’ for problem, ‘*TS*’ for tentative solution, ‘*EE*’ for error-elimination, we can describe the fundamental evolutionary sequence as follows ...



“This sequence is not a cycle”, argues Popper, “the second problem is, in general, different from the first: it is the result of the new situation which has arisen, in part, because of the tentative solutions which have been tried out, and the error-elimination which controls them” (ibid: 243).

World Two

With respect to world two this procedure applies to subjective knowledge. According to Popper all animals, from the time that they are born, possess a type of hypothetical knowledge in the form of innate expectations and anticipations. If these are disappointed the organism's first problems will arise and from this point knowledge begins to evolve via the correction and modification of its previously held knowledge. Ultimately, for Popper, "all subjective knowledge is dispositional" and its growth is equivalent to asserting that dispositions alter over time as a result of changes in the external environment (ibid: 66-7). This is what he defines as learning from experience. Therefore, at any one instant in the life of an organism, it can be said to possess a certain repertoire of dispositions that "constitute ... its [momentary] inner state", that composes its subjective knowledge (ibid: 343).

What is of fundamental importance to Popper is his belief that world two is essentially a realm of activity, formed entirely of a process of production. He argues that epistemologists should not concentrate their attention on this productive operation, but ought to instead focus on knowledge itself, the product. That is, in Popper's terms, priority should be given, not to subjective knowledge, but to objective knowledge. His reasoning behind this assertion is as follows:

“I admit that the objective structures for which I claim priority are caused by human behaviour. Being causal, the subjective approach may seem to be more scientific than the objective approach which, as it were, starts from effects rather than causes. Though I admit that the objective structures are products of behaviour, I hold that the argument is mistaken. In all sciences, the ordinary approach is from the effects to the causes. The effect raises the problem - the problem to be explained, the explicandum - and the scientist tries to solve it by constructing an explanatory hypothesis” (ibid: 114-5). Therefore, “we should realise that the study of the products is vastly more important than the study of the production, even for an understanding of the production and its methods” (ibid: 114).

Here we see the emergence of another element in Popper’s thought, that it is through the study of world three that a fuller comprehension can be gained, not only of this realm itself, but also of world two; the reverse, the ability to understand world three by examining world two, according to Popper, does not hold (see ibid: 112). Ultimately he justifies this whole approach in the ensuing manner:

“the subjective act or dispositional state of ‘understanding’ can be understood ... only through its connections with third-world objects. For I assert the following three theses concerning the subjective act of understanding.

- 1) That every subjective act of understanding is largely anchored in the third world

2) that almost all important remarks which can be made about such an act consist in pointing out its relations to third-world objects; and

3) that such an act consists in the main of operations with third-world objects: we operate with these objects almost as if they were physical objects.

This, I suggest, can be generalised, and holds for every subjective act of 'knowledge': all the important things we can say about an act of knowledge consist of pointing out the third-world objects of the act - a theory or proposition - and its relation to other third-world objects. ... *the activity of understanding consists, essentially, in operating with third-world objects*" (ibid: 163-4).

World Three

What precisely are, then, third-world objects? In essence they are the "objective contents of thought", they are such things as theoretical systems, scientific and poetic thoughts, works of art, problems and problem situations, the contents of journals, books and libraries, and critical arguments (ibid: 106). All these possess objective knowledge in the form of their logical content. The crucial element that makes such a world possible, the phenomenon that transforms subjective into objective knowledge, is language. Subjective knowledge becomes objective "when we say what we think; and even more so when we write it down, or print it" (ibid: 25). Two of the most

significant features of human language, to Popper's mind, which endow it with such an ability are its descriptive and argumentative capacities. As he explains:

“Without the development of an exosomatic descriptive language - a language which, like a tool, develops outside the body - there can be no object for our critical discussion. But with the development of a descriptive language (and further, of a written language), a linguistic third world can emerge; and it is only in this way, and only in this third world, that the problems and standards of rational criticism can develop. It is to this development of the higher functions of language that we owe our humanity, our reason. For our powers of reasoning are nothing but powers of critical argument” (ibid: 120-1).

Popper leaves us in little doubt, therefore, over the importance which he places upon a linguistically formulated world three.

The evolution of objective knowledge proceeds along the lines shown in the previous diagram, through a process of error-elimination or systematic rational criticism. However, this procedure has one fundamental advantage over and above the comparative process in the animal world: because our theories are exosomatic they can be proven wrong and eliminated with, in most cases, no actual harm coming to those people holding them. To paraphrase Popper, our hypotheses can die in our stead (ibid: 244).

The idea that the contents of world three have an external existence apart from those people who did or still do hold them does, of course, tie-in with his assertion that world three is an ontologically distinct realm. Although it is a human product once formulated it takes on an autonomous existence, it transcends its makers, and then has the capacity to act back upon them or others. Popper argues thus:

“In our attempts to solve ... problems we may invent new theories. These theories ... are produced by us: they are the product of our critical and creative thinking, in which we are greatly helped by other existing third-world theories. Yet the moment we have produced these theories, they create new, unintended and unexpected problems, autonomous problems, problems to be discovered. This explains why the third world which, in its origin, is our product, is *autonomous* in what may be called its ontological status. It explains why we can act upon it, and add to it or help its growth, even though there is no man who can master even a small corner of this world. All of us contribute to its growth, but almost all our individual contributions are vanishingly small. All of us try to grasp it, and none of us could live without being in contact with it, for all of us make use of speech, without which we would hardly be human” (ibid: 161).

What Popper is, therefore, arguing is that objective knowledge, once formed, exists apart from any of us, it is “*knowledge without a knower: it is knowledge without a knowing subject*” (ibid: 109).

One of the most important characteristics possessed by world three inhabitants is their logical content for, whereas the occupants of world two stand in causal relationships, those of world three stand in logical relationships. These relations exist regardless of whether they are known of or not. In fact, Popper asserts, it is because of the very impossibility of our ever extrapolating all of the logical consequences associated with a theory that its full potential is never comprehended, even by its creator. This is further evidence, he notes, that a theory;

“in its logical sense, is something objective and something objectively existing - an object that we can study, something that we can try and grasp. It is no more paradoxical to say that theories or ideas are our products and yet not fully understood by us than to say that our children are our products and yet not fully understood by us, or that honey is a product of the bee, yet not fully understood by any bee”. Consequently, “the student of the history of ideas will find that ideas have a kind of life (this is a metaphor, of course); that they can be misunderstood, rejected, and forgotten; that they can reassert themselves, and come to life again. Without metaphor, however, we can say that they are not identical with any man’s thought, or belief; that they can exist even if universally misunderstood, and rejected” (ibid: 299-300).

If we return to Popper’s evolutionary scheme one can see that the relationship between the tentative solutions and the problem is a logical one. Consequently, the progressive evolution of objective knowledge occurs through the continuous

operationalisation of world three entities, a process of conjecture and refutation, dependent ultimately on the logical nature of such entities. By testing the logical consistency between solutions and problems, by attempting to eliminate logical contradictions, we can move ever nearer, though never attain, the truth.

Sub-Worlds

Now it may have been noticed that an apparent discrepancy exists in the description of Popper's world three represented above. At one point he argues that the transition from subjective to objective knowledge occurs when an idea is expressed linguistically, when it is affirmed sensuously. However, elsewhere Popper states that world three contains all knowledge that is a logical consequence of already created knowledge, even if it has not been or never will be discovered by humankind, i.e. objective knowledge also contains non-objective elements. He subsequently clarified his position to deal with this difficulty by proposing three sub-divisions of world three. Firstly, there exists world 3:1 which he describes as "the materialised, the stored-up part of world three ... Libraries belong to it, and probably certain memory-carrying parts of the human brain" (Popper 1974: 1050). Then there is world 3:2 that consists of "the part of world three which has been grasped or understood by some people ... , the world of thoughts consciously thought" (ibid: 1051). Finally, there is

world 3:3 which encompasses the remaining non-materialised, non-cogitated, items of objective knowledge. Popper uses the example of natural numbers to illustrate this particular sub-division; because there are an infinite amount of such numbers consequently there will always be some that never enter worlds 3:1 or 3:2. World 3:3 is described by Popper as “a kind of shadow world”, but, he assures us, “shadows exist in a physical sense” (ibid: 1051).

What Popper appears to imply is that world three items acquire greater efficacy the more sensuous or material they become. So either an individual, through the manipulation of world 3:2 elements, creates a new world 3:2 item or they discover one already extant in world 3:3. This having happened, such phenomena can be ‘crystallised’ into sensuous/material form through speech or text, i.e. through being transformed into world 3:1 objects. The actual form such things take does not affect the nature of the knowledge which it carries, the medium is not the message. It is only after this transmutation has occurred that world three items can be discussed and criticised, can become forces in the evolutionary progress of objective knowledge. Once formed a world 3:1 article may never again be recognised as such, be seen to carry knowledge, but this does not mean, therefore, that it loses its world three status. Popper uses a book to illustrate this point:

A book “contains objective knowledge, true or false, useful or useless; and whether anybody ever reads it and really grasps its contents is

almost accidental. A man who reads a book with understanding is a rare creature. But even if he were more common, there would always be plenty of misunderstandings and misinterpretations; and it is not the actual and somewhat accidental avoidance of such misunderstandings which turns black spots on white paper into a book, or an instance of knowledge in the objective sense. Rather, it is something more abstract. It is its possibility or potentiality of being understood, its dispositional character of being understood or interpreted, or misunderstood or misinterpreted, which makes a thing a book. And this potentiality or disposition may exist without ever being actualised or realised” (Popper 1992: 115-6).

Problems in world three

It can be seen that Popper lays before us a bold and explicit set of hypotheses and rightly so if he is to satisfy his own methodological criteria. Not surprisingly they have attracted a fair amount of criticism; however, I do not want to dwell on the problems that have been highlighted generally in this area, but instead concentrate on some of the issues that specifically concern the study of material culture.

Popper’s thesis refers to the ideational realm purely in the singular, world three is a universal phenomenon, one that is indivisible. Therefore, the presence of a plurality

of cultures, based say on linguistic differences, is denied. Although world three owes its evolution to language it is not structured by it, distinct languages do not result in divergent types or forms of knowledge. The language within which a piece of knowledge is expressed offers no insurmountable barrier to its being understood by others from a different linguistic tradition, for translation, although occasionally problematic, is never impossible. Consequently;

“words ... play a merely technical or pragmatic role in the formulation of theories. Thus ... words are mere means to ends (different ends). And the only intellectually important ends are: the formulation of problems; the tentative proposing of theories to solve them; and the critical discussion of the competing theories” (Popper 1974: 15).

However, at first glance, the proposal that there exists for all intents and purposes just one culture seems rather strange, we often talk of the differences and, less often, the similarities between separate cultures and the concomitant notion of cultural identity. Now more than ever, it seems, peoples are asserting their own specific culture, frequently centred around their language. Therefore, while not wanting to enter into the debate over what actually constitutes the boundary of a culture, it does seem commonsensical to believe that distinct cultures do exist. Yet, on one level, Popper is not denying that this is in fact the case. What he does say is that all propositions can be assessed rationally, logic offers a universal criterion through which world three

entities can be appraised no matter what their origin. For Popper, then, we could argue that the sum of world cultures comprises a world Culture, world three.

So all objective knowledge occupies a single realm, at any one particular moment in time world three is comprised of the totality of objective knowledge, all knowledge so far formulated by humankind and all knowledge implied by these formulations. Popper likens world three to a cathedral, one that, like Gaudi's Sagrada Familia, is in a state of continuous construction. Indeed, Popper's cathedral does seem to possess truly spiritual qualities; firstly, if we include, as he does, all implied but yet undiscovered knowledge, then large parts of the building have already been completed without our realisation and may remain unknown to us forever; secondly, there is, as we have seen, but one cathedral - Popper denies that in the past, now or in the future there may be different construction projects.

Problems arise when we try and apply this theoretical scheme to historical investigations. As we saw earlier Popper's evolutionary epistemology always begins with a problem situation, a combination of the problem in hand and its third world background. The latter "consists of at least a *language*, which always incorporates many theories in the very structure of its usages ... , and many other theoretical assumptions, unchallenged at least for the time being" (Popper 1992: 165). Popper argues that "the aim of all *historical understanding* is the hypothetical reconstruction

of a historical problem-situation” and he himself demonstrates this by using Galileo’s formulation of a theory of the tides as an example (ibid: 170). Difficulties emerge when the limits of a problem situation try to be defined and Popper admits that this a “complex affair” (ibid: 172). If it is to contain all those world three elements that bear on the specific problem itself then we would have to include all those items that Galileo, in this example, could have had no knowledge of at all. If we restricted ourselves to including that we know Galileo had access to at that particular time then we seem to approach a more realistic position, but in so doing we are challenging the relevance of perceiving world three as a universal phenomenon. The ‘problem situation’ for Galileo was not world three in totality, nor even that part of world three that he could know, but that portion which he did know at the time. The limits of his knowledge rested on factors such as his own mentality and environmental determinants in the shape of mountains and seas that denied him access to related knowledge in other parts of the world, i.e. world two and world one phenomena. This is not a negation of world three, just a questioning of Popper’s assertion that it is the most significant aspect in historical understanding. One possible answer to this problem is to concentrate on analysing Galileo’s own perceptions concerning the problem situation, but this reduces historical understanding to a world two task which is precisely the position Popper wanted to get away from.

The promotion of world three universality within socio-historical studies is also compromised in another very important way. Popper does not take into account the

effect that certain power relations can have on the access to knowledge for various sections of a society, the view that he presents reflects a society in which every individual has equal access to all world three items, a culturally egalitarian society. As an ideal this is commendable, but in reality it is plainly not the case. No matter how we conceptualise the relationship between power and culture there is no escaping the fact that one exists, one that has actual and fundamental consequences in all areas of life. In fact, it could well be argued that, under circumstances where the mobilisation of power is at its greatest, the presence or absence of logical inconsistencies is of little or no consequence. World three items do not compete between themselves, isolated from human agency they can do nothing. Once again, this argument does not deny the existence of world three, just its practicality as the most consequential factor in research.

Returning to the notion of problem situations, Popper argues that they do not just exist for scientists like Galileo, we all confront them in our everyday life as difficulties, petty or major, that have to be resolved somehow. The difference between our approach and that of the scientist is mainly one of degree; “the evidence on which we ... act is accepted after the most cursory examination; and *the crucial discussion of competing theories which is characteristic of good science goes (as a rule) far beyond the kind of thing with which we are perfectly satisfied in practical life*” (ibid: 80). The theories that scientists produce must also be open to testing and possible falsification. the more open they are to such circumstances the more scientific the theory. This is

not, obviously, how people behave day to day, I do not drink a bottle of bleach to try and falsify my belief that it is poisonous. This, or rather the idea behind it, can be extended to the scientific community and this is precisely what Thomas Kuhn describes as 'normal science', i.e. scientists accepting theoretical assumptions rather than continually questioning them. Popper would accuse such scientists of acting in bad faith, of undertaking bad science. The majority of lay people can therefore be described as bad scientists.

At the end of the day what Popper seems to be asserting is that to understand any human action we must first build up a picture of the problem situation confronting them, that is both the problem itself and the cultural items available that can help them in overcoming it. We have already seen the difficulties associated with constructing such a picture with respect to scientific problems, yet it appears an even greater task when dealing with the seemingly more mundane actions of everyday life. Because 'the evidence on which we act is accepted after the most cursory examination' the theories we employ are in no way analysed rigorously before being employed, therefore the choice of such ideas is not usually the outcome of a logical process. Also, the range from which we choose appears to be the result of chance more than anything else, they constitute a ragbag collection of preconceived notions, prejudices, superstitious beliefs, etc. - they do not seem to be suitable candidates for inclusion in a logical problem situation.

The presence of numerous illogical elements suggests that we could get further towards an understanding of a person's actions by trying to comprehend their particular subjective state, what they perceive to be their reasons, motives, beliefs, etc. behind the actions they perform. To be fair to Popper he does not dismiss such an approach, but he does believe in "the superiority of the third-world method of critically reconstructing problem situations over the second-world method of intuitively re-living some personal experience (a limited and subjective yet at the same time indispensably suggestive method whose value I do not wish to deny)' (ibid: 170). To Popper, then, the second-world approach is of a speculative rather than a validity nature, but his view of this method is rather blinkered, confined to one that reflects a radical form of hermeneutics which by itself offers a soft target.

Popper and material culture

The implications of Popper's work with respect to the conceptualisation of material culture are interesting. Let's go back to his thoughts concerning the nature of books. He argued that it is "neither its composition by thinking animals nor the fact that it has not actually been read or understood [that] is essential for making a thing a book, ... it is sufficient that it might be deciphered" (ibid: 116). There are two related aspects of this line of argument that need to be addressed. Firstly, Popper is implying

that objective knowledge does not have to be the outcome of our intentional activity. Theories, beliefs, suppositions, etc. can come about as the unintended by-products of other theories, beliefs and suppositions; even language itself can be seen as “an unintended by-product of actions directed at other aims” (ibid: 117). Secondly, it does not, in fact, even require the presence of humans to produce objective knowledge - “a series of books of logarithms, for example, may be produced and printed by computer” (ibid: 115). It is the second proposition that seems, to my mind at least, the most contentious and the one that ultimately presents difficulties for Popper’s own theory.

To begin with, one could argue that his proposal that a computer can produce objective knowledge does not actually mean that such knowledge is a non-human product. Computers only operate as a consequence of the human knowledge programmed into them. Anyway, without getting too involved in the whole artificial intelligence debate Popper’s example is not as cut and dried as he appears to suggest. Another example which he uses to illustrate this same point is that of D.N.A. or, more specifically, “the logical content of our genetic code” (ibid: 73). At first sight this seems to be a better example than that concerning the computer, yet here again there emerge distinct problems. If Popper is to argue that the content of our genetic code constitutes part of world three then, of course, this means that in some respects world three has been around a lot longer than the human race and that the evolution of objective knowledge is actually, and not just metaphorically, tied to biological

evolution. There are two points that need to be made about this position. Firstly, this comes very close to conflating worlds two and three when we remember that world two includes innate expectations and anticipations, certain dispositions that have their origins in the genetic makeup of an organism. Secondly, it seems to contradict many of the other statements that Popper puts forward in this area. He nearly always uses biological analogies to explain his evolutionary epistemology and that is what they usually remain, analogies. Now, for the most part, the growth of objective knowledge is inseparable from language; “it is only within a language ... that ... knowledge in the objective sense become[s] possible” (ibid: 122). Obviously, then, following this tack objective knowledge cannot exist before the emergence of humankind and, even then, not until the first language to possess both descriptive and argumentative functions develops. This contradiction is not easily resolved within his system, yet it should not be seen as specific to Popper; such problems occur, as we shall see later, whenever knowledge is too closely bound up with language.

Conclusion

To sum up then, world three is comprised of autonomous items of objective knowledge whose defining characteristic is the logical content they possess. The most important and active of these items are those which are linguistically formulated and

hence open to description and debate. As such they have a physical presence either as speech or, more usually, as text - these are world 3:1 phenomena, objects of material culture. Now we have already mentioned that for Popper it makes no difference as to what the actual form these world 3:1 phenomena take as long as they can be deciphered, as long as they still have the dispositional character of being open to understanding. However, when he writes about such items it is nearly always with reference to texts, objects whose logical content is already linguistically arranged and so usually offers relatively little resistance to be comprehended. Concomitantly, books are produced for the express purpose of communicating ideas; although this intention of the author is not in itself a criterion for inclusion within Popper's world three. So why does he, in the main, restrict himself to the example of books for, following his own guidelines, there is no rational argument for so doing? Is it just mere coincidence that he illustrates his position with an example from which the retrieval of information is typically a straightforward business? Yet ease of interpretation cannot act as an adequate explanation. At the end of the day it does seem odd that when Popper talks of world 3:1 objects he cites D.N.A. molecules at one extreme and books at the other. I have already stated why I do not agree with extending the limits of world 3:1 to include the former, but I do want to go beyond those objects which are intentionally produced purely for communicative purposes within a linguistic framework. Language does not provide a limiting criterion for material culture as Popper regularly implies, the vast majority of artefacts cannot be viewed as passive signifiers in some form of linguistic code. Consequently, artefacts,

as possessors of meaning, differ radically from texts or speech and as such are unable to be analysed along purely semiotic lines, (in the Saussurean sense at least). It will be a main aim of the following study to describe how information is stored in artefacts in a non-linguistic fashion and how it can be recovered.

However, this is not to say that there is nothing in Popper's work which is of relevance to our own study. Firstly, Popper must be commended for attempting to explain the presence of information within material objects; even if we disagree over its actual nature the very fact that he tackles a subject that has been, for the most part, ignored by others deserves some recognition. Secondly, the controversial assertion that such knowledge, once produced, has an independent existence requires further consideration as the physicality of artefacts implies that this proposition contains an element of truth. In other words, material culture may indeed, under certain conditions, constitute 'knowledge without a knowing subject'. Thirdly, following on from this we can argue that, as Popper does with reference to world three items, artefacts have the dispositional capacity to be understood; as humanly inscribed objects material culture possess the potential to be interpreted. The term 'humanly inscribed' is utilised here both to limit our inquiries to those objects resulting from human agency and to extend them beyond the boundaries set by language so as to include all those material products made by humankind. Finally, artefacts, as humanly inscribed phenomena, have the ability to affect our activity in the world on a number of levels. An important idea that will be developed later in this study is that we

understand artefacts not only in a reflective way, but also through our physical involvement with them; we possess practical and embodied knowledge of artefacts which influences our behaviour towards them in different ways. Furthermore, these forms of understanding correspond not only to the artefact itself, but also to the relationships which exist between them and the contexts which they help compose. However, before we discuss these issues we must first pay some attention to the process whereby information is made material, how it enters a physical object. This will be the subject of the next chapter.

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Objectification

Introduction

The previous discussion of Popper's work has, hopefully, moved us closer to a position which accepts the association of information with all human material products. The following section will attempt to formulate and describe how this occurs, that is, how information 'enters' an artefact. Central to this task will be the elaboration of the concept known as objectification which was first advanced by Hegel and Marx, a notion central to their philosophies, although, not surprisingly, differences emerge over its nature and consequences. However, it can be safely argued that both saw objectification as an essential process, one whose absence severely effected the possibility of humanity's development. As such we shall discuss both theorists' work concerning this concept in order to gain a better understanding of it and then use this understanding as a basis for a modified interpretation of objectification; the claims that I shall be making for this conceptualisation will be of a more modest kind than those formulated by Hegel and Marx. Therefore, it will not be seen as a vital operation to be

undertaken by all, but rather it will be confined in its application and refer primarily to a process whereby human thought can be perceived as being allied to physical objects during their manufacture, how, in fact, material culture is possible.

Hegel: Objectification as alienation

The inclusion of Georg Hegel in a study of material culture may seem a little incongruous as he is usually seen as the epitome of an idealist philosopher. This is indeed true, but it need not inevitably lead us to the conclusion that he attached little importance to physical objects. There are certain sections in Hegel's work where the presence of such items plays a key role, most notably in *The Phenomenology of Mind* (where objects are discussed in the abstract), *The Lectures on Aesthetics* (where particular objects are analysed) and *The Philosophy of Right*. Much of what is relevant to our concerns is to be found in the former two texts and it is upon these that we shall concentrate.

Much of Hegel's mature work can be seen to revolve around the exposition of a notion central to his whole philosophy, the absolute idea. This essentially spiritual phenomenon, often equated with God, is involved in a dynamic process whose ultimate goal is self-comprehension. To achieve this aim development takes place on a number of levels, namely logic, nature and mind or spirit (*Geist*). The philosophy of

the latter level is itself divided into three main phases: subjective spirit, approximately synonymous to individual psychology; objective spirit, related to the state, social and economic institutions, etc.; and absolute spirit, which encompasses art, religion and philosophy. Within and between each phase spirit's knowledge of itself increases through a dialectical process whereby consciousness continually externalises itself and then sublates this posited otherness. This scheme is summarised by Hegel near the end of *The Phenomenology of Mind*:

“The surmounting of the object of consciousness ... is not to be taken one-sidedly as meaning that the object showed itself returning into the self. It has a more definite meaning: it means that ... the emptying of self-consciousness itself establishes thinghood, and that this externalisation of self-consciousness has not merely negative, but positive significance ... for in doing so it establishes itself as object, ... sets up the object as its self. ... there is also this other moment in the process, that self-consciousness has just really cancelled and superseded this self-relinquishment and objectification, and has resumed them into itself, and is thus at home in its otherness as such” (1964: 789-90).

“The terminus”, of this process for Hegel, “is at that point where knowledge is no longer compelled to go beyond itself” (ibid: 137). Therefore, “consciousness will come to a point at which it lays aside its semblance of being hampered with what is foreign to it ...; it will reach a position where appearance becomes identified with essence ...

And, finally, when it grasps this its own essence, it will connote the nature of absolute knowledge itself” (ibid: 145). This whole operation is neatly summed up by Christopher Arthur:

“Spirit learns what it truly is (and its relationship to the world of objectivity) at the same time, and in exact proportion, as it becomes what it truly is through manifesting itself in objective form (in morality, in bourgeois life, in the state, in religion), and in so doing it eventually ends its estrangement from its world through identifying itself in it” (1986: 52).

The presence of an external ‘otherness’ to consciousness, it can be seen, is a necessary aspect of Hegel’s theory and such phenomena are present in all three phases of spirit’s development. As the quotation from Arthur states otherness usually refers to non-material objects, but physical things are alluded to on occasion. The most explicit of which are to be found in those sections of his work that deal with the emergence of consciousness and the importance of art.

According to Hegel self-consciousness is not an inherent quality possessed by humans, instead it is attained through an anthropogenetic process. Basically this requires the establishment of a relationship characterised by mutual recognition. Without going into the niceties, the formation of the first stable association that comes anywhere near this requirement is an inherently violent process that inevitably leads to the emergence of

unequal associations between parties. This is the renowned master-servant relationship, one that determines how both protagonists interact with, amongst other things, the material world. The master's experience of physical reality is merely second-hand, one that occurs only through the servant; "the master relates himself to the thing mediately through the bondsman" (Hegel 1964: 235). Due to the fact that the servant has to work in order to provide for the master the master is inevitably detached from the material world, as they have no need to labour they have no real contact with it. Ultimately, their relations with the physical world are reduced to ones of an essentially vicarious and ephemeral nature distinguished by the immediate gratification of their desires. This gratification, "this satisfaction, however ... is itself only a state of evanescence, for it lacks objectivity and substance" (ibid: 238). The master only acts on things in a negative manner, purely as a consumer, a connection that is necessarily transient and unfulfilling. This situation, combined with the fact that the master perceives the servant only as another object, a possession, thus denying any chance of mutual recognition, obstructs the master from reaching self-realisation.

The relationship between the servant and physical reality is of a quite different nature, one that rests firmly on the fact that they are obliged to work on the material environment. It is through the activity of labour that spirit progresses, because it is through labour that the "consciousness of the bondsman comes to itself" (ibid: 238). As Hegel explains, "in fashioning the thing, self-existence comes to be felt explicitly as his [i.e. the servant's] own proper being, and he attains the consciousness that he

himself exists in its own right and on its own account” (ibid: 239). The situation in which this transpires occurs when the servant begins to work on the physical world and immediately confronts its materiality, it offers resistance to his wishes. “Labour”, therefore, “is desire restrained and checked, evanescence delayed and postponed” (ibid: 238). It is this scission between desire and its satisfaction that is of importance to Hegel, a gap that consists of conscious activity. During this activity the servant is continually reminded of the physicality of the world which reinforces an emerging awareness of the distinction between him and the external environment, an awareness that constitutes the emergence of self-consciousness.

A correlative aspect of this process is that in the act of production the resultant object acquires certain qualities possessed by the labourer. In Hegel’s own words: “this activity giving shape and form, is at the same time the individual existence, the pure self-existence of that consciousness, which now in the work it does is externalised and passes into the condition of permanence. The consciousness that toils and serves accordingly attains by this means the direct apprehension of that independent being as its self” (ibid: 238). One outcome of labour, therefore, is that the resultant product contains and exhibits in a permanent manner the consciousness or aspects of the consciousness that helped create it. In other words, the worked-upon material world comes to reflect, to a degree, the nature of humanity, a reflection that is solid, objective and enduring; Peter Singer uses the ubiquitous chair as an illustration of this point - if someone “carves a log of wood into a chair, his design and his efforts remain

a part of the world” (1991: 61). It is precisely due to this objectification of consciousness that artefacts have the capacity to act back on the servant. He recognises that the qualities embodied in the object are in fact his own qualities and through this recognition he is able to see himself as a self-conscious being. As Hegel explains: “by the fact that the form is objectified, it does not become something other than the consciousness moulding the thing through work; for just that form is his pure self-existence, which therein becomes fully realised. Thus precisely in labour ... the bondsman becomes aware, through this re-discovery of himself by himself, of having and being a ‘mind of his own’” (1964: 239).

Yet for the servant too full self-realisation is not forthcoming, because, according to Hegel, the bondsman’s consciousness;

- . “the repressed and subordinated type of consciousness ... becomes, in the formative activity of work, an object to itself, in the sense that the form, given to the thing when shaped and moulded, is his object; he sees in the master, at the same time, self-existence as a real mode of consciousness. But the subservient consciousness as such finds these two moments fall apart - the moment of itself as independent object, and the moment of this object as a mode of consciousness, and so its own proper reality” (ibid: 242).

This partial realisation is, therefore, due to two related factors. Whereas the servant perceives the master as an independent self-conscious being the reverse is not the case. Consequently mutual recognition is denied and this entails that the servant can never become fully aware of himself as an autonomous person. This also means that the possibility of recognising their own qualities within their products is to a degree negated. It transpires that neither master nor servant reach full self-realisation because neither participate totally in the dialectic of externalisation and sublation, or, in more everyday economic language, production and consumption. The servant externalises himself in an object, but cannot then sublimate this externalisation, whereas the master does not externalise himself, but consumes the externalisation of another. This being said, it seems enough in Hegel's opinion that the servant experiences the activity of labour for him to gain some kind of self-consciousness and thus enable the progression of spirit.

What needs to be stressed at this juncture is that even though the master-servant relationship signals an important point in the progress of spirit it occurs at a relatively early stage in this process and in the totality of the *Phenomenology* it takes up just over ten of more than eight hundred pages. Also, although material objects have a part to play it is the role of conscious activity that Hegel views as being of most consequence in this section. More specifically, it is the realisation of the transformative capacity of labour that enables the emergence of self-consciousness. More emphasis is

placed on artefacts in the higher phase of absolute spirit where he deals with the function of art.

Hegel gave a series of lectures on aesthetics which were later collected and published; it is to these that we shall now turn, especially the introductory lectures. Here we find one of the most accessible and succinct expressions of his position and it is worth quoting at length:

The active self-realisation of humanity is obtained “in a twofold way: *in the first place theoretically*, in as far as he has inwardly to bring himself into his own consciousness, with all that moves in the human breast, all that stirs and works therein, and, generally, to observe and form an idea of himself, to fix before himself what thought ascertains to be his real being, and, in what is summoned out of his inner self as in what is received from without, to recognise only himself. Secondly, man is realised for himself by *practical* activity, inasmuch as he has the impulse, in the medium which is directly given to him, and externally presented before him, to produce himself, and therein at the same time to recognise himself. This purpose he achieves by the modification of external things upon which he impresses the seal of his inner being, and then finds repeated in them his own characteristics. Man does this in order as a free subject to strip the outer world of its stubborn foreignness, and to enjoy in the shape and fashion of things a mere external reality of himself. Even the child’s first impulse involves this practical modification of external things. A boy throws stones into the river, and then stands admiring the circles that trace themselves on the

water, as an effect in which he attains the sight of something that is his own doing. This need traverses the most manifold phenomena, up to the mode of self-production in the medium of external things as it is known to us in the work of art” (1993: 36).

This passage contains a number of interesting points. There are, not surprisingly, noticeable similarities between the situation described above and the master-servant relationship. Yet in the present case circumstances that restrict its smooth-running are less apparent, now once an artefact has been created its potentialities can be more easily realised. In other words, we can now fully acknowledge that human products are manifestations of conscious activity, that they therefore exhibit consciousness in an objective manner and by recognising these characteristics, these elements of consciousness, humanity gains a greater awareness of itself. This comes about, of course, through the dialectical process of externalisation and sublation described at the beginning of this section, although, as we shall see, in this context material objects play a central role. The actual nature of the artefacts involved is, consequently, of some significance.

Hegel distinguishes between natural objects and artefacts and also between artefacts themselves. With respect to the former distinction it needs to be understood that the progress of mind can only be accomplished through the activity of humankind, the self-realisation of the absolute is thus contemporaneous with the self-realisation of humanity. Consequently, according to Hegel:

“God is more honoured by what mind does or makes than by the productions or formations of nature. For not only is there a divinity in man, but in him it is operative under a form that is appropriate to the essence of God, in a mode quite other and higher than in nature. God is a Spirit, and it is only in man that the medium through which the divine element passes has the form of conscious spirit, that actively realises itself” (ibid: 34).

What this means, then, is that although all things have their origins in God the products of humanity are assigned a ‘higher rank’ than those of nature. This is because artefacts are the outcome of conscious activity and God, being mind, can relate more adequately to such objects because they share a common factor, i.e. consciousness. The odyssey of mind is, obviously, an essentially ideal process that requires an appropriate medium. Humanity, being self-conscious, and its products, being the outcome of conscious activity, are therefore more apt channels for this operation than the ‘unconscious’ phenomena constituting nature.

However, returning to the second distinction noted at the beginning of the last paragraph, not all human products are seen to be of equal merit in this respect. The circles created by the boy throwing stones lie at the lower end of a continuum that reaches its apex with the creation of religious art. An artefact’s position on this continuum appears to rest on how closely integrated the two components of self-

realisation, theory and practice, are. In Michael Inwood's view, "at lower levels (e.g. stone-throwing), practice is distinct from theory. But at higher levels, practice involves the production of meaningful objects (painting, poems, etc.) that are similar to such theoretical products as textbooks" (1993: 122). The more fully theory and practice are combined within an artefact the greater its importance for the progression of mind. It is significant that this formula does not exclude any human product, however meagre, from this process; it is just that "art, especially religious art or at least art that expresses a vision of the whole world-process rather than some peripheral aspect of it, contributes more to the development of man's, and thus God's, self-consciousness than do the production, use and contemplation of knives and forks" (ibid: 119).

Yet, even religious art does not provide a perfect medium for self-realisation, a pure reflection of the qualities that we and the absolute possess. This is due ultimately to the sensuous nature of art and artefacts: "the work of art is not yet pure thought, but despite its sensuousness it is no longer mere material existence, like stones, plants and organic life. The sensuous in the work of art is itself an ideal sensuous, but since it is not the ideality of thought, it is still there externally as a thing" (Hegel 1993: 127). The absolute being ideal can only achieve full self-realisation through an ideal medium, through conceptual thought, through philosophy. So even though art and artefacts operate in the same sphere as philosophy, i.e. in absolute spirit, they represent "even the highest ideas in sensuous forms, thereby bringing them nearer to the character of natural phenomena, to the senses, and to feelings" (ibid: 9). Consequently, "art is not,

either in content or in form, the supreme and absolute mode of bringing the mind's genuine interests into consciousness. The form of art is enough to limit it to a restricted content. Only a certain circle and grade of truth is capable of being represented in the medium of art" (ibid: 11). Charles Taylor summarises Hegel's position like this;

"the central contrast between conceptual description and artistic presentation of the absolute can thus be seen in this way: in philosophy my awareness of the absolute is couched in concepts, the inner, transparent vehicles of thought whose function is to point beyond themselves to a domain of objects they correctly portray or characterise. In art, my awareness is embodied in a work, an external, sensuous object, which by no means simply refers me beyond itself to something it describes, but rather lets us see the absolute only through its presence in a sensuous object. In descriptive discourse, we frequently remember what was conveyed while forgetting the words used or even what language was spoken. But the 'message' of a work of art does not survive the eclipse of its sensuous medium, or only in an emasculated way" (Taylor 1978: 471-2).

It would seem that, from the discussion that we have already undertaken, the latter part of Taylor's final sentence is closer to the truth. For Hegel art, and human products in general, act like a corroded mirror in which both we and the absolute can recognise aspects of ourselves, but due to the condition of the glass the reflection we perceive is only partial and forever incomplete. Yet art and artefacts should not be

dismissed for this failing for through them comes an awareness that other means of self-realisation are possible. Objects of human creativity offer a bridge between the material and the spiritual, because they combine elements of the two; art is “the first middle term of reconciliation between pure thought and what is external, sensuous, and transitory, between nature with its finite actuality and the infinite freedom of the reason that comprehends” (Hegel 1993: 10).

Finally in this exegesis the rather obvious point concerning the circumstances above needs to be highlighted, they all occur within social contexts. Social experience is of major importance as the individual is primarily seen as an abstraction from the social. The production of artefacts is firmly rooted within social relations, people are immanently linked through productive activity and, under circumstances of universal recognition, they are conscious of these ties. In Hegel’s words;

“the labour of the individual for his own want is just as much a satisfaction of those others as of himself, and the satisfaction of his own he attains only by the labour of others”. He goes on, “he also performs the universal task as his conscious object. The whole becomes in its entirety his work, for he sacrifices himself, and precisely by that means receives back his own self from it” (Hegel 1964: 377).

We move towards self-realisation partly through the production and consumption of objects that are, due to the circumstances mentioned above, essentially social in

character. By externalising and subsuming ourselves in these socially constituted artefacts we come to recognise that we are necessarily social beings.

Before moving on to discuss Marx's views in this area it may be worthwhile just to highlight a few aspects of Hegel's work that appear to be significant for our study. It is interesting to note that he sees artefacts as occupying an ambiguous middle ground between the material and the ideal, human products appear to possess components of both which supplies them with a unique character. More significantly the process of objectification always contains an element of loss, of alienation. The moment after we have acted our deed is no longer purely our own so that "language and labour are outer expressions in which the individual no longer retains possession of himself *per se*, but lets the inner get right outside him, and surrenders it to something else" (ibid: 340). Our deeds now become the property of others and can be interpreted and manipulated without regard to the intentions or desires that we originally attached to them. We shall come back to the reasons and implications of Hegel's thoughts over this matter later on. It is now time to discuss Marx's ideas on this topic beginning first with his critique of Hegel.

Marx: Objectification and alienation

The final section of Marx's third *Economic and Philosophic Manuscript* contains this appreciation:

“The importance of Hegel's *Phenomenology* and its final result - the dialectic of negativity as the moving and producing principle - lies in the fact that Hegel conceives the self-creation of man as a process, objectification as loss of object, as alienation and supersession of this alienation; that he therefore grasps the nature of *labour* and conceives objective man ... as the result of his *own labour*” (Marx 1992: 385-6).

There are a number of different points within this quotation that have important consequences with respect to the conceptualisation of artefacts. The two that we shall concentrate on are; firstly, that Marx apparently agrees with Hegel over the importance of labour and alienation, and secondly, that he also agrees with the association of alienation with objectification. Now it is true that Marx believed that labour, objectification and alienation are related concepts for, as the extract asserts, objectification and alienation occur in and through activity, they are both modes and outcomes of labour. The importance of labour for Marx is illustrated in the following;

“productive life is species life. It is life-producing life. The whole character of a species, its species-character, resides in the nature of its

life activity, and free conscious activity constitutes the species-character of man". He goes on, "man makes his life activity itself an object of his will and consciousness. He has conscious life activity. It is not a determination with which he directly merges. Conscious life activity directly distinguishes man from animal life activity" (ibid: 328).

The stress on 'conscious life activity' bears similarities to Hegel's position, but the two differ radically over its actual nature. For although Marx agrees with Hegel as "he sees *labour* as the *essence*, the self-confirming essence, of man" (ibid: 386), he parts company with him due to the fact that "the only labour Hegel knows and recognises is *abstract mental* labour" (ibid: 386). Conscious life activity for Hegel, in Marx's view, is activity that occurs purely in the realm of consciousness, in the mind. Now, at first glance, this criticism appears a little misplaced, Marx seems to have overlooked such passages as the master-servant relationship where activity does take place in the material world, (see Arthur 1983: 71). However, as we noted earlier, not only does this section constitute just a small part of the *Phenomenology*, a work where the whole purpose is to describe the development of an ideal entity towards self-knowledge, but also, concomitantly, its real importance rests on its spiritual rather than material result. The activity that Hegel is primarily concerned with is that undertaken by the absolute, activity that can be expressed in a number of different ways as the *Phenomenology* illustrates.

Marx, obviously, sees things somewhat differently - instead of ascribing activity to a spiritual entity it is attributed to 'Man'. As he asserts; "the first premise of all human history is, of course, the existence of living human individuals ... real individuals, their activity and the material conditions under which they live, both those which they find already existing and those produced by their activity" (Marx 1970: 42). Labour is firmly rooted in the material world, because we are real, objective beings. Our very existence depends upon our interaction with the world as "life involves before everything else eating and drinking, a habitation, clothing and many other things. The first historical act is thus the production of the means to satisfy these needs, the production of material life itself" (ibid: 48). Ultimately, "to say that man's physical and mental life is linked to nature simply means that nature is linked to itself, for man is a part of nature" (Marx 1992: 328). Therefore, whereas conscious activity for Hegel is activity that is purely conscious in its origins for Marx it is conscious activity on and in the physical world carried out by physical beings. In sum, then;

"it is ... in his fashioning of the objective that man really proves himself to be a *species-being*. Such production is his active species life". Marx continues, "through it nature appears as *his* work and his reality. The object of labour is therefore the *objectification of the species-life of man*: for man reproduces himself not only intellectually, in his consciousness, but actively and actually, and he can therefore contemplate himself in a world he himself has created" (ibid: 329).

We have now reached an important point; how Marx differs from Hegel over his interpretation of objectification, and especially its relationship with alienation. Much has already been written on this subject so I shall endeavour to confine myself to that which appears directly relevant to our study. A major aspect of Marx's critique of Hegel in the final *Manuscript* of 1844 concerns itself with the accusation that the latter made no distinction between objectification and alienation, but, in fact, conflated the two. To backtrack slightly, it may be recalled that spirit moves towards self-knowledge by, in the first instance, externalising or alienating itself in a variety of objective forms, usually of a non-material nature. Alienation is, therefore, responsible for the creation of objectivity and this is what Hegel describes as the positive side of alienation. Yet simultaneously in this very act the negative side of alienation is also realised for in creating the objective world spirit moves into a realm which it did not formerly inhabit. Alienation thus also involves an act of relinquishment, a relinquishment of spirit into an 'otherness', for it is only by expressing itself in a medium other than itself that spirit can come to self-knowledge. The progress towards self-realisation results from the sublation of spirit's product, of objectivity. Hegel makes good use of the ambiguity surrounding the term sublation in the German language where it can mean both to abolish and to preserve. Therefore, in this process alienation is at the same time both annulled through internalisation and retained through the recognition of objectivity's otherness. Consequently at the heart of Hegel's work there exists an inherent tension between seemingly contradictory elements. It follows that we are presented with a position in which both objectification

and alienation occur, or rather where objectification inevitably entails alienation, objectification is alienation.

This is where Marx and Hegel are fundamentally opposed, because for Marx alienation is a particular form of objectification, one that is tied to particular historical and social circumstances. The basis of his criticism, again, lies in his rejection of Hegel's idealism. Alienation is alienation of spirit. Spirit can only come to know itself through alienating itself in different spheres such as religion, civil society, etc. But, argues Marx, these 'objective' phenomena can not be anything of the sort due to the fact that they are ultimately the product of purely cognitive processes. "Self-consciousness", he writes, "through its alienation, can only establish thingness, i.e. an abstract thing, a thing of abstraction and not a real thing" (ibid: 389). Consequently;

"when, for example, Hegel, conceives wealth, the power of the state, etc., as entities estranged from the being of man, he conceives them only in their thought form ... They are entities of thought, and therefore simply an estrangement of pure, i.e. abstract, philosophical thought ... The appropriation of man's objectified and estranged essential powers is therefore firstly only an *appropriation* which takes place in *consciousness*, in pure thought, i.e. in *abstraction*" (ibid: 384).

Sublation, the simultaneous abolition and preservation of alienation, is an act of consciousness, a change of mind, a process, argues Marx, that leaves reality untouched.

Now, Marx seems to have pushed his criticism too far for, as we have already noted, Hegel saw it is an essential requirement that spirit objectify itself. Yet, on the other hand, nothing can exist which is not related to spirit. The result, then, is not so much a denial of objectivity by Hegel, but instead, as Arthur defines it, an attitude of ‘ambivalence’ towards it for “spirit requires another in which to find its being reflected, while at the same time requiring that there be nothing that is not it” (Arthur 1982: 18).

Marx’s views on objectivity appear far from ambivalent - “to say that man is a *corporeal*, living, real, sensuous, objective being with natural powers means that he has *real, sensuous objects* as the object of his being and of his vital expression, or that he can only *express* his life in real, sensuous objects” (Marx 1992: 390). The existence of an external, material world is a prerequisite for our very being, not only literally, but also as *human* beings; we can “create nothing without *nature*, without the *sensuous external world*” (ibid: 325). Objectification is therefore firmly rooted in the physical world, a process that is carried out by real people in the real world through real activity. Through labour, through activity on and in the world we objectify ourselves, we see ourselves reflected in the world which we help to create; “the practical creation

of an objective world, the fashioning of inorganic nature, is proof that man is a conscious species-being” (ibid: 328-9). Marx’s conception of objectification is summed up in his *Excerpts from James Mill’s Elements of Political Philosophy*. Here he contends that;

“in my production I ... have objectified the *specific character* of my *individuality* and for that reason I ... both have enjoyed the *expression* of my own individual *life* during my activity and also, in contemplating the object, I ... experience my personality as an *objective sensuously perceptible* power *beyond all shadow of a doubt*”. Also, “in your use and enjoyment of my product I ... have the *immediate* satisfaction and knowledge that in my labour I ... gratified a *human* need, i.e. that I had objectified *human nature* and hence ... procured an object corresponding to the needs of another *human being*”. Consequently, “our productions ... [are] as many mirrors from which our natures shine forth” (ibid: 277-8).

The importance Marx placed on artefacts is now apparent. Objects that we create play a vital role in our self-creation, our essential being is “established by objects” (ibid: 389), for it is through them and their manufacture that we objectify ourselves. Marx believes in the possibility that “all *objects* [can] become for [Man] the *objectification of himself*, objects that confirm and realise his individuality, *his objects*” (ibid: 352-3).

However, it is not inevitable that artefacts play such a positive role, they can just as well act in an extremely negative way. The part they do play is determined by the nature of the social relations present in a society at a particular point in time. One of the defining features of present day society is that social relations, based on the division of labour, establish an inherent state of alienation in all aspects of everyday life. Alienation, in Marx's opinion, is a distorted form of objectification, not as in Hegel's opinion, a necessary aspect of it. It contains no redeeming features, it is "a flaw, a weakness, something which ought not to be" (ibid: 399). For Marx, in very general terms, alienation is seen as loss. Only the first part of the equation of objectification occurs in that humanity externalises itself, but then this externalisation is separated permanently from its makers. Consequently any possibility of internalisation is denied. This situation has its origins in actual social circumstances and as such is open to change. Alienation is, therefore, a historical not, as Hegel thought, an ahistorical phenomenon.

In the *Economic and Philosophical Manuscripts* Marx asserts that alienation affects all aspects of human existence and this is explained by defining four interrelated modes that help constitute it. Alienation thus involves estrangement from productive activity, estrangement from the product, estrangement from other people and estrangement from our species-being. Marx argues that as a logical consequence of our being alienated from our labour (i.e. labour activity, as a commodity, becomes out of necessity the private property of someone else) so, it follows, are its products - "the

estrangement of the object of labour merely summarises the estrangement, the alienation in the activity of labour itself” (ibid: 326).

Marx’s views on the artefacts manufactured under capitalism are neatly summed up in one sentence from the first *Manuscript*. “The externalisation of the worker in his product means not only that [i] his labour becomes an object, an *external existence*, but that [ii] it exists *outside him*, independently of him and alien to him, and begins to confront him as an autonomous power; [iii] that the life which he has bestowed on his object confronts him as hostile and alien” (ibid: 324). Let’s take each aspect in turn. We are already familiar with the following point; “the product of labour is labour embodied and made material in an object’ (ibid: 324). This occurs no matter what kind of social relations are in place, it is a necessary but not a sufficient condition for both objectification and alienation. It is only in combination with remaining two factors that the process of objectification is transformed into that of alienation.

For Marx, the products of capitalist production exist ‘independently’ as the inevitable consequence of the fact that the worker does not own, at any moment during the manufacturing process or afterwards, the product; it is always the private property of the capitalist, (this is also the case with regards to the raw materials and the machinery needed for its production). Consequently, the worker has no control over the commodity after its production, what becomes of it is entirely out of their hands even if it is essential for their very survival. It is because of this very real rupture between

producer and product that Marx believes there is an inevitable impoverishment of humanity as it is forever expending itself, externalising itself, and receiving very little in return, the reciprocal act of internalisation is denied. As he says;

“the more the worker exerts himself in his work, the more powerful the alien, objective world becomes which he brings into being over against himself, the poorer he and his inner world become, and the less they belong to him ... The worker places his life in the object; but now it no longer belongs to him, but to the object. The greater his activity, therefore, the fewer objects the worker possesses. What the product of his labour is, he is not. Therefore, the greater this product, the less is he himself” (ibid: 324).

In essence what Marx is proposing here is an existential zero-sum equation which results in the enhancement of commodities and simultaneously the impoverishment of its maker. This occurs to such an extent that products seem to take on a life of their own so that “in bourgeois society capital is independent and has individuality, while the living person is dependent and has no individuality” (Marx 1978: 485). In capitalist societies social relations appear to be primarily between commodities and it is only as owners of commodities that people can enter such relationships.

So we come to the third point noted above, the hostile confrontation between producer and product. Under capitalism artefacts become the dominant partner in this

relationship, they are active whereas their makers are reactive. In Marx's words; "this fixation of social activity, this consolidation of what we ourselves produce into an objective power above us, growing out of our control, thwarting our expectations, bringing to naught our calculations, is one of the chief factors in historical development up till now" (Marx 1970: 53). The domination of artefacts as commodities occurs both in production and consumption. In manufacturing an object a worker's actions are determined by the productive process and its associated machinery so that they do not, "use the instruments of labour, but the instruments of labour use the worker ... Through its conversion into an automaton, the instrument of labour comes to confront the worker during the labour process as capital, as dead labour, which controls the living labour power and sucks it dry" (Marx 1957: 451). Once made the product has the ability to manipulate the behaviour of humanity through the creation of needs and new desires and this rather obvious state of affairs is fully exploited under capitalism. Consequently;

"each person speculates on creating a *new* need in the other, with the aim of forcing him to make a new sacrifice, placing him in a new dependence and seducing him into a new kind of *enjoyment* and hence into economic ruin. Each attempts to establish over the other an alien power, in the hope of thereby achieving satisfaction of his own selfish needs. With the mass of objects grows the realm of alien powers to which man is subjected, and each new product is a new potentiality of mutual fraud and mutual pillage" (Marx 1992: 358).

Miller: Objectification in the modern world

At this point the relevance of the foregoing surveys of Hegel and Marx needs to be made more explicit. It is the aim of this section to move towards a notion of objectification which can act as part of the theoretical foundations for an analysis of material culture. A similar undertaking has recently been carried out by Daniel Miller and it through a brief critique of his work in this area, specifically his interpretation and use of Hegel's and Marx's ideas, that progress can hopefully be made. Miller's work is of importance due not only to the fact that it is one of a very limited number of contemporary examinations of material culture, but also because of the breath and strength of the analysis offered.

The opening section of his *Material Culture and Mass Consumption* concerns itself with formulating a theory of objectification which corresponds, in simple terms, to "a series of processes consisting of externalisation (self-alienation) and sublation (reabsorption) through which the subject of such a process is created and developed" (Miller 1993: 12). Miller's distinctive conceptualisation of objectification is attained through an act of abstraction, primarily from Hegel's *The Phenomenology of Mind*. By lifting Hegel's notion of objectification from its philosophical context he believes that it can then be applied as a tool in the analysis of culture, and material culture in particular. The characteristics of Hegel's theory that Miller is most keen to retain are those with "dynamic, positive and non-reductionist implications" (ibid: 30). According

to Miller, Hegel gave priority to neither subject nor object, but insisted that the two emerge simultaneously as a result of a process of mutual construction. Consequently, objectification denies the independence of subject and object, hence its non-reductionist character. Also, this process by its very nature is in perpetual flux, the relations between subject and object are never inert. Finally, Miller believes that objectification is inherently contradictory in that it incorporates an irreconcilable tension between positive and negative elements. On the positive side the subject, humanity, progresses as a consequence of this process, but, paradoxically, only through the negating act of self-alienation. Miller places much importance on this situation and we shall come back to it shortly. At the end of his discussion of Hegel, Miller sums up his own position:

“Primarily then, objectification is intended as the foundation of a theory of culture. Indeed, if culture is defined as the externalisation of society in history, through which it is enabled to embody and thus reproduce itself, objectification and culture may be defined with respect to one another. The use of the term objectification then asserts the necessity for a particular kind of relationship between human development and external form. This relationship is never static, but always a process of becoming which cannot be reduced to either of its two component parts: subject and object” (ibid: 33).

The next section of Miller’s study concerns itself with an investigation of Marx’s critique of Hegel and the conceptualisation of the former’s own notion of

objectification. One may be forgiven for assuming that Miller would come down in favour of Marx's perspective, due to the latter's emphasis on the importance of the material world and especially the part played by the product. It is, therefore, surprising to discover that this is not the case, rather in Miller's opinion it is Hegel's theory that offers more to our understanding of material. How does he come to reach this conclusion?

Much of Miller's dissatisfaction appears to stem from Marx's thoughts on alienation. As we have already noted, Marx perceived alienation not as an inevitable aspect of objectification, but a distorted form of objectification tied to a certain type of social circumstance existing under capitalism. Miller disagrees; aligning himself with Hegel he believes that objectification combines both positive (the creation of the objective) and negative (a feeling of relinquishment) moments which are inseparable and this is an ahistorical phenomenon always and ever present. As he acknowledges, the basis for this argument is taken from Jean Hyppolite's piece on Lukac's *The Young Hegel*. In his critique Hyppolite asserts the following:

“By objectifying himself in culture, the State, and human labour in general, man at the same time alienates himself, becomes other than himself, and discovers in this objectification an insurmountable degeneration which he must nevertheless try to overcome. This is a *tension inseparable from existence*, and it is Hegel's merit to have drawn attention to it and to have preserved it in the very centre of

human self-consciousness. On the other hand, one of the great difficulties of Marxism is its claim to overcome this tension in the more or less near future and hastily attribute it to a particular phase of history. It is surely an oversimplification to imagine that this tension can be reduced to a super-structure of the economic world. It is undeniable that the capitalist system represents a form of human alienation, but it can hardly be the only one" (Hyppolite 1969: 87).

For Miller this line of reasoning points to our adopting Hegel's notion that "self-alienation is an inescapable part of a positive process, but one which has an intrinsically contradictory nature" (Miller 1993: 43). To add weight to his argument he draws upon the anthropological work of Nancy Munn. Miller's premise is that by showing that objectification, along Hegelian lines, exists in the non-industrial aboriginal societies of Australia and the Melanesian islands one can, therefore, safely propose that it is not restricted to a particular socio-economic context, i.e. capitalism, but instead is universal and ahistorical. In contradiction to Marx, Miller proposes that the possibility of objectification occurring without self-alienation is an untenable assertion. Such a process, as would occur under communism, is regarded merely as a Romantic notion.

Now my contention is that Miller is misguided in his preference for Hegel's conceptualisation of objectification; I believe Marx's is the most fruitful in its provision of a basis for our understanding of material culture. Fundamental problems arise with

Miller's notion of objectification because however 'violent' he is with the act of abstraction he can not but help allow some elements of Hegel's idealism from being carried over, elements that entail certain difficulties. It will be recalled that the first act within objectification for Hegel, Marx and Miller is that of externalisation. However, for Hegel and Miller this act is synonymous with self-alienation, yet for Marx while this can indeed be the case, it need not necessarily be so, much depends upon socio-historical circumstances. The reasoning behind Hegel's position is that for him objectivity itself is an important problem due to its apparent otherness to spirit. The resolution of this difficulty is accomplished by asserting that objectivity is in fact nothing but the externalisation of spirit itself. This self-alienation of spirit results in the creation of external forms that, in the act of sublation, are not abrogated but continue to exist whilst losing their quality of otherness. Objective structures remain rather like a residue, a by-product of this process and this is what Hegel refers to as the positive achievement of spirit's self-alienation. Now the primary reason why this is described as self-alienation by Hegel is that objectivity is viewed as in some way contradictory to its source, it is necessary for spirit to create an opposite in which it can be reflected in order for a dialectical process to occur.

However, for Marx, of course, objectivity presents no such problems, it is not the creation of an ideal entity, but of *objective human beings*; physical artefacts and social institutions are the result of active material entities. Therefore, there is no need for the products of human activity to become alienated from them so that they can take part in

the dialectics of objectification, all that is required is that humans form real objects in the world. It is not the case that just because these objects then have an external existence distinct from their producers that they must consequently possess alien characteristics, that they are destined to become alienated and alienating. The realisation that alienation is a contingent phenomenon occurring within particular circumstances is Marx's distinct achievement, and, ironically, the presence of these self same circumstances is one possible reason why Hegel overlooked this eventuality.

According to Arthur:

“Hegel's tragedy is that, though objectification and alienation are conceptually distinct, and are distinguished brilliantly by Marx, Hegel cannot grasp this possibility, for it depends upon a historical potential beyond the limits of his bourgeois standpoint. Thus he collapses them together so that the necessity of spirit's odyssey of self-objectification becomes at the same time its self-estrangement, and scientific criticism is powerless to do more than point to the content hidden behind the forms of estrangement and pass off this insight as their sublation” (Arthur 1986: 68).

So what of Hyppolite's defence of Hegel that Miller endorses, which proposes that alienation produces a “tension inseparable from existence” and that this is at “the very centre of human self-consciousness”; alienation under capitalism is but one instance of an ever present phenomenon (Hyppolite 1969: 87)? Here again we find the association of externalisation with alienation, that the former invariably implies the latter and that

this inexorably leads to Hyppolite concluding, “objectification and alienation are inseparable” (ibid :88). Unfortunately he adds little more to justify this position over and above that offered by Hegel. If, as Hyppolite suggests, Marx can be accused of being too strict in his application of alienation by applying it to just one phase of history then, likewise, he himself must face the accusation of diluting its analytical importance by asserting its universal presence. Concomitantly, if alienation is so ubiquitous there seems little point in the appeal that we ought to try and overcome it, this is merely a moral proposition doomed to failure (see Mészáros 1970: 240).

Finally, there is Miller’s invocation of Munn’s anthropological studies. It does appear slightly odd to use this body of work in support of a Hegelian position when Munn’s approach draws explicitly from Marx. The proposition that Miller wants to make is that self-alienation is present in pre-capitalist societies and one illustration of this comes from Munn’s study of aboriginal myth. As Miller summarises;

“in the myths, the ancestors undergo several forms of transformation from sentient beings into objects. First, the ancestors may transform the whole of their body into some visual feature such as a rock outcrop (metamorphosis); secondly, they may leave their imprint upon the ground through the impression of a part of their body, such as a footprint (imprinting); and thirdly, they may take out from within their body an object which then is transformed into a natural feature of the land (externalisation). Although the ancestors are perpetually in motion,

they may leave behind a number of such permanent and static signs of their transformations” (Miller 1993: 56-7).

It is within this pre-constituted world that humans objectify themselves, so that whereas their ancestors were involved in a process of objectification that was unrestrained, human objectification is both enabled and constrained by their ancestors’ activities. “As a result of this projective process”, Munn explains, “the material world comes to provide the individual with images or ‘fragments’ of himself. In the normal personality these ‘images’ are recognised as being outside the person and separate from him, and yet are experienced as inextricably bound up with him” (Munn in Miller 1993: 66). It is this ‘separation’ that Miller interprets as alienation yet there appears to be no strong justification for reaching such a conclusion. Munn’s work does not show that alienation is inevitable, rather it is the less extreme act of externalisation that she endorses. Objectification involves externalisation, alienation is the outcome of a distorted form of objectification. By reducing alienation to a moment within a process we are refused the use of a concept which could be utilised to describe a ‘pathological’ relationship with material objects. In opposition to Miller I want to suggest that alienation, far from being a universal ahistorical phenomenon, is instead not only confined to capitalist forms of production, but even here it is not all pervasive. It is still possible under such conditions for objectification to occur although the opportunities for such an eventuality are limited by the socio-economic factors present. This potentiality is, in fact, recognised by Marx, not all artefacts created within capitalist

societies are necessarily commodities and thus alienated products. "One who satisfies his wants with the product of his own labour ... does not make a commodity" (Marx 1957: 9).

Conclusion

The purpose of this chapter was to formulate a notion of objectification that would enable us to come to some kind of understanding as to how an aspect of humanity becomes associated to the objects people create. This being the case the significance of such a concept is relatively modest in comparison to that proposed by Miller. Unlike Miller objectification will be used in the following study only with reference to material culture, it is not seen as a concept that is applicable across the board to understanding culture in general. This is because there exist irreconcilable differences between the two major cultural forms that human productivity can initiate, between social structures, systems and institutions on the one hand and material artefacts on the other. Most obviously artefacts do not require the continued presence of human agency for their subsequent existence whereas societies cannot exist independently of human activity. We shall discuss this dissimilarity and its implications in more detail shortly.

Likewise, the notion of objectification expressed here is far more limited than Marx's, thus it is no longer seen as a necessary ontogenetic process which humanity *per se* must experience in order to develop fully. Instead, objectification is perceived as a process that occurs whenever an artefact is made whereby meaning enters the object; the nature of this meaning is contingent not only, as Marx argued, on the circumstances surrounding the act of production, but also on the characteristics of the resultant object, (this second point will be developed in the following section). It is because an 'element' of the producer enters the artefact that it can be recognised as a product of human activity and only because of this factor that it can be interpreted.

The elucidation of this element, for the moment let's call it knowledge, will take up much of the remaining study, but one point can be made at this stage; knowledge need not necessarily be linked with reflective, intentional activity. The unintended consequences of human activity can also be read as meaningful, pollution, waste products and refuse are all open to interpretation - the archaeologist, for example, often has little else to go on other than the dross left by previous cultures. Take the activity of flint knapping in which a tool and waste products are formed, both help us to understand the nature of lithic technology. As Nicole Pigeot explains;

“each percussion act is ‘expressed’ into a flake and its negative, and each debitage sequence leaves on the ground a series of products and by-products. These elements retain, to a various degree, some evidence of the succession of gestures carried out prior to their own detachment. On this basis, it becomes possible to decipher and reconstruct, with

great precision, the coherence of the knapping process, the techniques employed, and the aims of the actor” (Pigeot 1990: 126-8).

Furthermore, by-products are open to re-interpretation by their originator, they can become products themselves; small flint debris may be collected and then embedded in bone or wood to form a saw-like implement, they are thus transformed from waste products into useful objects with no modification to their physical nature. The distinction between intended products and refuse is, therefore, open to interpretation, the smoke produced by burning wood shavings may be pollution to one person, but be seen by another as an essential ingredient in the manufacture of kippers. By extending knowledgeable activity beyond that of discursive thought, as was hinted at in the previous chapter, all material products created by us can be seen as possessing meaning; again this will have to be substantiated presently. However, in the following chapter we will concentrate on the implications arising from the artefact’s materiality with reference to the work of Hannah Arendt.

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Physicality

Introduction

In the previous section we encountered Daniel Miller's conceptualisation of objectification which he saw as applicable to the study of culture *per se*. In this chapter it shall be argued that this cannot be the case, a single theory cannot be used to understand both material and non-material culture, because of material culture's very materiality. The physical nature of artefacts brings with it specific problems and consequently these need to be addressed in their own right, this distinct quality must be confronted.

In that all social life, no matter where or when, is undertaken in the presence of artefacts it is surprising to find that scant attention has been paid to their nature within sociology. What still seems to be of primary importance to contemporary social theorists, as it was for Comte, is the need to establish a definite object for investigation, in other words to objectify society in such a way that it forms a valid item for study. Now, it might be as a consequence of this preoccupation that little thought has been given to artefacts, yet this does not mean that present theorising has nothing to say on the subject. Ultimately both

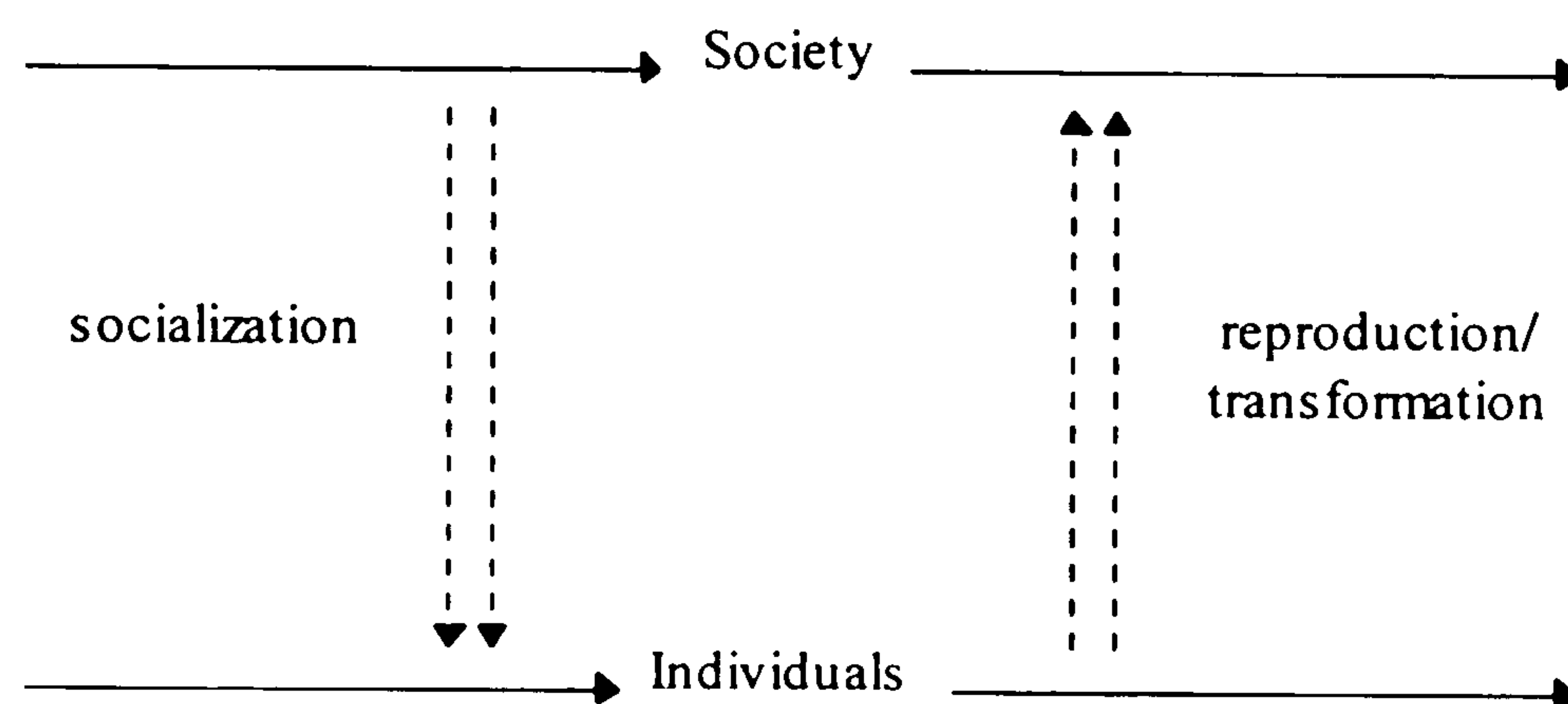
society (social structures, institutions, systems, etc.) and artefacts are the outcome of socially constituted human actions so ideas concerning the former may shed light on the latter.

The products of human agency

Probably the most influential of contemporary social theories is that of a type most notably formulated by those such as Roy Bhaskar and Anthony Giddens (see especially Bhaskar 1989 & Giddens 1986, 1990, 1991) which centre around notions of duality. At the outset it must be stated that this is not the place to argue for or against the overall adequacy of such an approach as an explanation of social phenomena, rather we want to ascertain what insights it can offer us with respect to material objects created by people. That being said a general outline of this position is provided by Bhaskar which essentially asserts that individuals and society exist in a relationship of mutual interdependence. He explains this as follows;

“people do not create society. For it always pre-exists them and it is a necessary condition for their activity. Rather, society must be regarded as an ensemble of structures, practices and conventions which individuals reproduce and transform, but which would not exist unless they did so. Society does not exist independently of human activity (the error of reification). But it is not the product of it (the error of voluntarism). Now the process whereby the stocks of skills, competencies and habits

appropriate to given social contexts, and necessary for the reproduction and/or transformation of society, are acquired and maintained could be generically referred to as socialisation. It is important to stress that the reproduction and/or transformation of society, though for the most part unconsciously achieved, is nevertheless an achievement, a skilled accomplishment of active subjects, not a mechanical consequence of antecedent conditions. This model of the society/person connection can be represented as below” (Bhaskar 1989: 36).



According to this scheme, despite their interdependence, people and society are ‘radically’ different things, ontologically distinct, and it is sociology’s task to investigate the latter in all its aspects. As the above quotation states society is seen as an ‘ensemble of structures, practices and conventions’ which owe their existence to certain enduring relationships. Bhaskar, therefore, argues for a relational conception of sociology’s subject matter, relations of which the social agents involved may or may not be aware.

In Giddens’s case things are less clear, especially over the nature of society; social systems are not given as much ontological solidity in comparison to Bhaskar, they appear more

ethereal in quality. This difference seems to lie in the amount of ‘externality’ given to social structures, Giddens allowing less than Bhaskar. One explanation for this difference between the two theorists is that although they are dealing with a similar subject their agendas are slightly different. Whereas Bhaskar is attempting to formulate the basis of a valid methodology for sociological investigations, Giddens is more concerned with undertaking an ontology of social being. However, both endorse the notion of the duality of structure, structure being simultaneously “medium and outcome of the conduct it recursively organises” (Giddens 1991: 374).

Consequently, we encounter the extremely obvious, but nevertheless crucially important distinction between two outcomes of human agency. Firstly, we have those products which rely on the chronic recursive activity of people for their continued existence, i.e. social systems and institutions. Secondly, we have those products which owe their existence, not to recursive behaviour, but to activity of a specific duration which terminates with the emergence of finished articles, i.e. artefacts. The incessant presence of human agency is therefore a necessity for the continuation of social structures, either in the same form or transformed in some way. The continual existence of an artefact, once made, requires no such human intervention. This distinction rests, of course, on their material nature, yet what else does this quality entail, what are the consequences of physicality?

To approach this substantial topic let's begin by returning to the end of the preceding section. In the closing part of Miller's critique of Marx he draws upon an argument espoused by Jean Baudrillard. According to Baudrillard Marx gave undue priority to the activity of labour, to the process of production. As we have already seen Marx did indeed place heavy emphasis on labour, because, in his eyes, it lies at the very centre of humanity's self-creation; "the object of labour is ... the objectification of the species-life of man" (Marx 1992: 329). What Baudrillard proposes is that by forwarding such a view Marx is implicitly endorsing a position that he sets out to refute, that of the political economists. For all these theorists' work is comprehended as the only real means through which humanity can realise itself, (a belief which, of course, Max Weber attempted to explain). Works ontogenetic status, it could be argued, is perceived to rest on ethical foundations.

Associated with this criticism is Baudrillard's assertion that Marx incorporated another Victorian value within his work, that of utility; humanity creates itself through socially useful labour. For Marx we begin to transform nature in order to satisfy basic human needs, "it is obvious that man, by his activity, modifies the forms of natural substances so as to make them useful to himself" (Marx 1957: 44). Herein lies the source of use-value for "the utility of a thing makes it a use-value" (ibid: 4) and use-value can only be realised in consumption. Baudrillard therefore accuses Marx of naturalising use-value, it is seen as unproblematic as it is intrinsically tied to pre-determined natural and stable human needs. The relationship between person and object is, then, objective and straightforward.

Consequently, what Marx overlooks by following this line of thought is, in Baudrillard's words, "the entire ideological and historical labour process that leads subjects in the first place to think of themselves as individuals, defined by their needs and satisfaction, and so ideally to integrate themselves into the structure of the commodity" (Baudrillard 1988: 71-2). Now whatever the validity of these claims, and they have by no means gone unchallenged, they do provoke a need to question the role and nature of labour and its relationship to its products. The first tentative steps towards analysing the consequences of the artefact's physicality shall therefore be taken through a discussion of labour. One of the most interesting and idiosyncratic studies of labour has been carried out by Hannah Arendt and it is to her work that we shall now turn, because it is via a critique of labour that she comes to assess the quality of 'durability'. Durability, a corollary of an objects material nature, has a number of important repercussions for Arendt and these are highly relevant to our own project, most especially to this section.

Arendt on activity

Arendt's 'The Human Condition' is, as its title implies, an attempt to come to some kind of understanding of the condition in which humanity presently finds itself. In her opinion these circumstances are far from ideal and she illustrates this assertion rather dramatically at the very beginning of her book. She argues that the launch of the first satellite in 1957 was accompanied by a sense of joy that was not triumphal in nature, but was instead

characterised foremostly by a feeling of relief, relief because we had moved closer towards freeing ourselves from our ‘imprisonment’ on earth. The task Arendt set herself was, therefore, to try and explain how the human condition had become so detestable that escape from the world appeared to be such an inviting alternative. At the heart of this analysis, argues Arendt, must lie an investigation into the nature of our activities, because it is precisely through our actions that the world has become as it is - in human activity lies the origins of human sorrows.

According to Arendt there are three fundamental human activities, “fundamental because each corresponds to one of the basic conditions under which life on earth has been given to man” (Arendt 1989: 7). Firstly there is labour, an activity that relates directly to our immediate survival as living creatures. Secondly there is work, this includes the production of a world of things that are distinct from nature and which out-live us. Finally there is action which, unlike the previous two activities, occurs directly between people without the mediation of the material world. As our study is essentially concerned with objects we shall not trouble ourselves with this third type. The distinction between labour and work is one that has rarely been made by those concerned with human activity, yet, for Arendt, “the phenomenal evidence in its favour is too striking to be ignored” (ibid: 79).

An important clue to understanding the difference between labour and work is provided by language. What appears to be true for all European languages, both ancient and modern, is that “the word ‘labour’, understood as a noun, never designates the finished product, the

result of labouring, but remains a verbal noun to be classed with the gerund, whereas the product itself is invariably derived from the word for work” (ibid: 80). In Arendt’s opinion this etymological distinction does reflect actual circumstances, labour does not result in the production of durable things whereas work does. “Labour”, according to her, “is the activity which corresponds to the biological process of the human body, whose spontaneous growth, metabolism, and eventual decay are bound to the vital necessities produced and fed into the life process by labour” (ibid: 7). The products of labour

“have a very brief existence in the world as they are consumed almost immediately after they are made”. She goes on to elaborate that “after a brief stay in the world, they return into the natural process which yielded them either through absorption into the life process of the human animal or through decay; in their man-made shape, through which they acquired their ephemeral place in the world of man-made things, they disappear more quickly than any other part of the world. Considered in their worldliness, they are the least worldly and at the same time the most natural of all things. Although they are man-made, they come and go, are produced and consumed, in accordance with the ever-recurrent cyclical movement of nature” (ibid: 96).

The most obvious example of such a product is food, its growth, preparation and consumption, but other labour activities include things such child bearing and rearing whose end result would be hard to define as a product. Labour can, therefore, be described as ‘unproductive’ in the sense that there is no end to the labour process, no

ultimate, permanent product just the perpetual cycle of life itself; life is the product. Consequently, labour by itself does not distinguish us to any great extent from animals.

In the chapter concerned with labour in 'The Human Condition' Arendt makes one of her most striking propositions, that Marx's political philosophy is flawed because he overlooks this schism between labour and work. While a discussion of the political implications that ensue from this position is not within our remit the charge itself is worthy of comment. Basically it states that Marx conflated the activities of labour and work "by misrepresenting the labouring, non-productive activity in terms of work and fabrication" (ibid: 306). Now, whatever the adequacy of Arendt's own position, and this has been questioned (see Jay 1978: 348-68), her basic criticism does appear to have some validity. As we have already seen, in Marx's view, humans create themselves through labour, they distinguish themselves from other animals the moment they 'begin to produce their means of subsistence'. This is labour in Arendt's sense of the word, the activity necessary for life's continuation. However, this specific form of activity in Marx's view does not constitute a positive process with respect to humanities development, but rather one from which we must be liberated as much as possible. As he states;

"the realm of freedom actually begins only when labour which is determined by necessity and mundane conditions ceases ... Freedom in this field can only consist of socialised man, the associated producers, rationally regulating their interchange with Nature, bringing it under their common control, instead of being ruled by it as by the blind forces of Nature; and achieving this with the least expenditure of energy and under conditions

most favourable to, and worthy of, their human nature. But it nonetheless still remains a realm of necessity. Beyond it begins that development of human energy which is an end in itself, the true realm of freedom, which, however, can blossom forth only with the realm of necessity as its basis” (Marx 1978: 441).

The labour prevalent in the realm of necessity appears far removed in its nature and consequences from the form of labour we encountered Marx elaborating earlier in this study. Instead of acting as a process for self-realisation it is seen as a type of activity to be avoided or, more realistically, ameliorated if possible. What seems to distinguish this kind of labour from the more positive sort Marx usually describes, apart from its inevitability, is that it does not finish with the appearance of a product, a physical object. This does not epitomise the vast majority of his theoretical work in this area, however, where “the labour process ends in the creation of something”, and this ‘something’ is necessary for our objectification - and our alienation for that matter (Marx 1957: 170). Labour, for Marx, is essentially productive labour or, in Arendt’s terms, work.

What Arendt’s criticism highlights, therefore, is that much of our activity “leaves nothing behind”, there is no remaining residue (Arendt 1989). Because of this and due to its inescapability labour has been perceived throughout time as futile, delegated to those parts of society who traditionally occupy positions of little status, something to be transcended in order that activities of more consequence can be engaged in. In sum, labour is by definition laborious, it is also natural and necessary.

Work, like labour, is also a process, but beyond this not only does it have a beginning it has an end as well signalled by the appearance of an object. To have such a definite starting point and a definite, predictable terminus signifies a far greater degree of control in that, whereas labour is driven by natural necessity, work involves a mastery over nature. Our relationship with nature is viewed by Arendt as essentially a violent one, because in all acts of fabrication nature is in some way destroyed. This control over nature also implies self-control so that “homo faber is indeed a lord and master, not only because he is the master and has set himself up as master of all nature but because he is master of himself and his doings” (ibid: 144).

Arendt on artefacts

However, the essential difference between labour and work does not lie in the nature of the activity undertaken, but primarily in its outcome, indeed that it has an outcome. When work has ended “an entirely new thing with enough durability to remain in the world as an independent entity has been added to the human artifice” (ibid: 143). The products of labour are transient, decaying or being consumed rapidly after their appearance. The products of work, on the other hand, are not consumed but used. It is, of course, possible to ‘use up’ a product of work, but this does not occur immediately, it is a long term process due to the object’s physical nature, its solidity. Such objects can also decay, but again this will happen over a relatively long period of time and there is always the

possibility that such an object can be mended or restored. What Arendt lays particular stress upon, therefore, is the durability of works product. Artefacts are transience captured and transformed into a permanent object, what she terms reification. The evanescent realms of nature and human thought are combined and modified through work into a lasting form. This does not happen without penalty as

“reification and materialisation ... is always paid for, and ... the price is life itself: it is always the ‘dead letter’ in which the ‘living spirit’ must survive, a deadness from which it can be rescued only when the dead letter comes again into contact with a life willing to resurrect it, although this resurrection of the dead shares with all living things that it, too, will die again” (ibid: 169).

What interests us more is not the nature of this process, something Arendt accuses Marx of being overly preoccupied with (see ibid: 108), but with the objects themselves and, more specifically, their ability to exist unchanged through time. The durability of artefacts ensures “their relative independence from men who produced and used them, their ‘objectivity’ which makes them withstand, ‘stand against’ and endure, at least for a time, the voracious needs and wants of their living makers and users” (ibid: 137). This quality thus ascribed to durable objects does not inevitably lead, as it does for Hegel and Miller, to them being perceived as in some way alien to humanity, instead it has intrinsically positive consequences. Artefacts act to ground human life, they offer it stability. In fact, our very identity, according to Arendt, rests not on our own being, which like all other aspects of nature is open to flux, but on the objects surrounding us. Due to the their

immutability we can retain or 'retrieve' ourselves by relating to "the same chair and the same table" (ibid: 137). Without them human existence would be characterised by an imposing ephemerality commanded by nature's relentless biological current, whereas "the human artefact bestow[s] a measure of permanence and durability upon the futility of mortal life and the fleeting character of human time" (ibid: 8).

An obvious consequence implied by this stance is that a reciprocal relationship exists between us and our creations, each affects the other. It goes without saying that artefacts owe their very existence to human endeavour, but once produced they "constantly condition their human makers" (ibid: 9). Our creations thus constitute much of what Arendt defines as 'the human condition'. As she explains at the beginning of her work;

"whatever touches or enters into a sustained relationship with human life immediately assumes the character of a condition of human existence. This is why men, no matter what they do, are always conditioned beings. Whatever enters the human world of its own accord or is drawn into it by human effort becomes part of the human condition. The impact of the world's reality upon human existence is felt and received as a conditioning force. The objectivity of the world - its object- or thing-character - and the human condition supplement each other; because human existence is conditioned existence, it would be impossible without things, and things would be a heap of unrelated articles, a non-world, if they were not the conditioners of human existence" (ibid: 9).

As we have already noted in the world-of-things Arendt places most importance on those that we manufacture through work rather than on those of purely natural origin. The human world, civilisation, the whole assemblage of human works, ultimately composes the objective realm against which human subjectivity stands and it is only after we have created this realm that we can also experience nature as objective; “without a world between man and nature, there is eternal movement, but no objectivity” (ibid: 137). Aligned with this is the fact that artefacts can not only be perceived by individuals over time, but also simultaneously by a number of different people. This shared experience also guarantees the objectivity of our existence; it is not a common nature which ensures this, but a common world. “Only where things can be seen by many in a variety of aspects without changing their identity”, Arendt writes, “so that those who are gathered around them know they see sameness in utter diversity, can worldly reality truly and reliably appear” (ibid: 57). Consequently, she believes that artefacts play an essential role in our activities with others in that this common world both “gathers us together and yet prevents our falling over each other” (ibid: 52). As she explains; “to live together in the world means essentially that a world of things is between those who have it in common, as a table is located between those who sit around it; the world like every in-between, relates and separates men at the same time” (ibid: 52). The importance placed upon manufactured objects by Arendt is clear to see, combined they form an essential aspect of the human condition. However, the part they play has not remained fixed throughout history and like many social theorists before her she perceives crucial differences between, for want of better terms, traditional and modern society. Human products have effected and have been

affected by the transition from the former to the latter. Arendt's account of this process is far from clear, however what is certain is her belief that within contemporary society labour activity has all but replaced work activity. Consequently, in Ronald Beiner's words, "a modern society is distinguished by the singular fact that the principal energies of that society are monopolised by the universal collective enterprise of production and consumption" (Beiner 1990: 360). Contemporary life is thus reduced to the level of a pseudo-natural, futile and cyclical process which can be defined as, after Marx, "consumptive production / productive consumption" (Marx 1974: 93). If work is now the only form of manufacture the objects thus produced can only be transient things, consumable, consumer goods. Therefore, whereas in previous societies tables and chairs were the products of work and so solid and stable, today's object's 'natural fate' is to be consumed "almost as quickly as food" (Arendt 1989: 124). This is an all embracing process which means that "eventually no object of the world will be safe from consumption and annihilation through consumption" (ibid: 133).

Not only does the fact that consumer goods come to possess such a quality through their creation through work, but their sheer abundance also exaggerates this situation. The quantity of these items is, of course, necessary as they have but the briefest of lives. Ultimately,

"the objective difference between use and consumption, between the relative durability of use objects and the swift coming and going of consumer goods, dwindles to insignificance. In our need for more and more

rapid replacement of the worldly things around us, we can no longer afford to use them, to respect and preserve their durability; we must consume, devour, as it were, our houses and furniture and cars as though they are the ‘good things’ of nature which spoil uselessly if they are not drawn swiftly into the never-ending cycle of man’s metabolism with nature” (ibid: 125-6).

The consequences for humanity that follow on from these changes can be easily conjectured. A world filled with transient objects, where “permanence, stability, and durability, have been sacrificed to abundance” is a world characterised by “universal unhappiness” (ibid: 126). For Arendt the lack of permanent objects denies the possibility of contrasting them with the evanescence objects of nature, all objects are now natural or pseudo-natural in that their primary quality is ephemerality. This absence of comparison is especially important with respect to ourselves, with no stable objects to set against our own transitory being a vital aspect of what it is to be human is refused us, our existence has, literally, no structure and no objectivity. This is one of the major sources of humanity’s discomfiture with the modern world, why it is experienced as alienating and why the possibility of fleeing from it altogether appears so attractive.

Conclusion

Arendt’s theoretical investigation concerning the nature of artefacts must be applauded not only for its originality, but also for the very fact that she attempted to tackle such an overlooked topic in the first place. Not surprisingly for this novel position there are

elements of Arendt's work that do present certain problems with respect to its general consistency and by discussing these briefly we shall be able to distinguish those aspects of her thought that offer most to our own understanding of artefacts. Some major problems arise from the discrimination she makes between work and labour. This dichotomy rests on a fundamental premise, that there are essentially two distinct types of human product, those that are immediately consumable and thus impermanent and those that are useable and stable. Consequently, the nature of the activity is determined by the outcome. If objects are forever being consumed replacements must be forever being made, whereas, of course, when objects are not expended in this way but instead used there is no such need for their continual production and hence no more activity is required. The distinction between work and labour, therefore, rests upon an objective criterion, upon the physical nature of the object produced and thus upon whether it is durable or not. It will be remembered that Arendt criticised Marx for not distinguishing between work and labour and this reproach can be logically extended so as to include a lack of concern over the character of the resultant objects. This latter criticism is valid, but one which Marx would see as insignificant compared to the relationship between the worker and their product. As Jennifer Ring points out,

"he and Arendt are both concerned about what happens to the objective world, but Marx believes the question of who has access to the goods pre-empt the question of whether or not the goods last ... The difference between well-made furniture, a pair of shoes, and a loaf of bread is insignificant to the worker, especially if he can afford none of them" (Ring 1989: 437-8).

For Marx there must exist the possibility of the producer interacting with their product in order for anything positive to result, i.e. for objectification to occur. Yet, under capitalism, of course, this is denied - the product is always, even during its creation, detached from its maker. Therefore, modern artisans are reduced to labourers, not because the qualities of the object or our attitudes towards them have changed, but because they are transient things in the sense that they disconnected during manufacture and literally separated from their makers at the moment of completion. That being said, Marx does not, of course deny the possibility of the proletariat acquiring goods, modern societies being characterised by “an immense accumulation of commodities” (Marx 1957: 3) the majority of which must necessarily be taken up by this class. It is only capital which the proletariat, by definition, do not possess. In Marx’s view, then, the fact that the world does or does not contain durable human products is of no immediate consequence and the presence of concrete objects does not inevitably produce beneficial effects.

However, Arendt’s emphasis on the durability of certain objects should not be ignored. Whilst accepting the importance of Marx’s views regarding the circumstances surrounding the production and ownership of artefacts, the fact that many of them do exist for a considerable amount of time, some for generations, should be taken into account. Arendt herself is less concerned over whether the objects we use are of our own making or the products of others and the question of possession is really for her a question of access. As both Arendt and Marx point out modern economies are entirely dependent on both

production and consumption, the purchase of goods is a absolutely necessary for capitalism existence. It is an inevitable aspect of capitalism, therefore, that the vast majority of people, including the more deprived sections of society, are surrounded by artefacts, whether they actually possess them or not. To emphasise this point we need only go back a few centuries and look at the amount of objects possessed by the majority of households at that time. Inventories made after the death of day labourers and small farmers in eighteenth century Burgundy list:

“the pot-hanger, the pot in the hearth, the frying pans, the quasses (dripping pans), the meix (for kneading bread) ... the chest, the bedstead with four pillars, the feather pillow and guedon (eiderdown), the bolster, sometimes a tapestry (cover) for the bed, the drugget trousers, the coat, the gaiters, a few tools (shovels, pickaxe)’. But before the eighteenth century, the same inventories mention only a few old clothes, a stool, a table, a bench, the planks of a bed, sacks filled with straw” (Braudel 1985: 283).

Modern life is thus characterised by the profusion of artefacts that surround each one of us of which all but a very few are made by other people. The nature of these objects, of which their durability, their physicality, is one of the most important qualities, can not but have important repercussions for human life. Whether these repercussions are as extensive as Arendt believes now needs to be addressed.

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The Language of Artefacts

Introduction

In the conclusion of the chapter centred around Popper's distinctive epistemology the statement was made that artefacts, as conveyors of meaning, differ radically from texts or speech; the purpose of the following section is to justify this claim. A characteristic of twentieth century thought has been its concern with language and the social sciences have not been immune from this trend, the application of methodologies whose roots are planted firmly in the linguistic tradition is widespread. However, it can be argued, as Christopher Gosden does, that "the moves towards language and then text represent a progressive loss of subtlety in handling people's relationship with the world" (Gosden 1994: 38-9). Specifically, with respect to the study of material culture, this practice has often resulted in the neglecting of the fact that artefacts may possibly constitute a unique field of meaningful activity as the inimitable qualities of such objects are reduced to merely imitating word-like properties. Consequently, as Miller rightfully points out, attempts to distinguish the distinctive qualities possessed by material objects have been few and far between,

confined to a small number of works on architecture and aesthetics and, it should be added, archaeology (Miller 1993: 96). This chapter will attempt to show, in the light of the previous section, how the physicality of material culture entails major differences between it and language. Furthermore, it will try and demonstrate how these differences result in artefacts possessing distinctive communicative qualities which make them simultaneously both better and more restricted at conveyers of knowledge.

Saussurian linguistics

To comprehend the persuasiveness of the linguistic approach we must first come to some basic understanding of its central features. The origins of semiology are to be found in the writings of Ferdinand de Saussure, particularly in his *Course in General Linguistics*. Saussure, unlike his contemporaries who were preoccupied with the rules of grammar, began his investigation from the premise that language is a system of signs, therefore, the sign constitutes the first object of inquiry. The sign has an arbitrary nature and it is this principle which “dominates all the linguistics of language; its consequences are numberless. It is true that not all of them are equally obvious at first glance; only after many detours does one discover them, and with them the primordial importance of the principle” (Saussure 1974: 68). What does Saussure mean by the arbitrary nature of the sign? In his eyes the sign contains two mutually

dependent elements, the signifier and the signified; the signifier being the phonological or graphological form of the sign, an acoustic or written image, and the signified being the related meaning or concept. The relationship between these two elements is neither inevitable nor natural, instead it is the outcome of cultural convention and as such is arbitrary. A common example used to illustrate this conventional association is that of the sign *dog*. There is no reason why the signifier *dog*, either in speech or writing, should better represent the concept 'dog' than any other signifier, they do not resemble a dog in sound or sight. Therefore, not only are the signifiers *chien* or *Hund* equally adequate, but *tod* or *blot* would also be acceptable if they were approved by a particular speech community. This is one aspect of the sign's arbitrariness; however there is another less obvious one for not only are signifiers noises or marks taken from an infinite amount of such items, the concepts they refer to are also carved out from the infinity of experience. That is, reality does not present itself to us in pre-determined blocks to which we then apply signifiers, it is people who divide up reality and this can be done in countless ways. Therefore, whereas different languages can have similar signifieds as in the case of the concept 'dog' in English and French this need not necessarily be the case. A good example is provided by Jonathan Culler:

"It is obvious that the sound sequences of *fleuve* and *rivière* are signifiers of French but not in English, whereas *river* and *stream* are English but not French. Less obviously but more significantly, the organisation of the conceptual plane is also different in English and French. The signified 'river' is opposed to 'stream' solely in terms of size, whereas a 'fleuve' differs from a 'rivière' not because it is

necessarily larger but because it flows into the sea, while a ‘rivière’ does not. In short, ‘fleuve’ and ‘rivière’ are not signifieds or concepts of English. They represent a different articulation of the conceptual plane” (Culler 1985: 23-4).

A further consequence is hinted at in this quotation for, if both signifier and signified are arbitrary, if the sign has no direct relationship with the world, where does language gain its meaning from? The ‘value’ of signs, argues Saussure, emerges solely from their alliance with other signs which together constitute a system, a totality that he terms *langue*. As he explains, “instead of pre-existing ideas then, we find ... *values* emanating from the system. When they are said to correspond to concepts, it is understood that the concepts are purely differential and defined not by their positive content but negatively by their relations with the other terms of the system. Their most precise characteristic is in being what the others are not” (Saussure 1974: 117). Saussure provides a famous illustration to help us understand this notion which Culler summarises as follows;

“we are willing to grant that in an important sense the 8:25 Geneva-to-Paris Express is the same train each day, even though the coaches, locomotive, and personnel change from one day to the next. What gives the train its identity is its place in the system of trains, as indicated by the timetable. And note that this relational identity is indeed the determining factor: the train remains the same train even if it leaves half an hour late. Indeed, it might always leave late without ceasing to be the 8:25 Geneva-to-Paris Express. What is important is that it be

distinguished from, say, the 10:25 Geneva-to-Paris Express, the 8:40 Geneva-to Dijon local, etc.” (Culler 1985: 27).

Ultimately, then, Saussure argues; “in language there are only differences. Even more important: a difference generally implies positive terms between which the difference is set up; but in language there are only differences without positive terms” (Saussure 1974: 120).

One final aspect of Saussure’s work which needs to be addressed concerns his views on temporality and language. Due to the arbitrary nature of the sign he argues that the primary method for understanding language must be synchronic; signs are defined, not through historical analysis, but by their relations within *langue* at a particular point in time. However, this is not to say that the synchronic approach by being ahistorical is totally atemporal. In all languages signs are necessarily arranged sequentially, language therefore operates through time in a linear fashion.

Now it was Saussure’s contention that his own studies in linguistics constituted but one part, though the most important part, of a general investigation into the nature of signs, a single area within semiology. Although he did not extend his work beyond linguistics many others have done so, taking up his ideas and employing them in a number of disciplines, anthropology and psychoanalysis for example. Yet there are certain problems in applying Saussure’s thoughts to phenomena beyond the realms of linguistics especially if we take his work on language as paradigmatic. With respect to

material phenomena a particular difficulty arises for, as we have seen, emphasis is placed upon *langue*, upon the association between signs, rather than upon how signs relate to reality. How, then, does language refer to objects and events in the material world? Unfortunately, Saussure does not say. One implied explanation, in Giddens's words, "is that it is not the word or sentence which 'stands for' objects or events in the world, but rather that the whole system of *langue* 'lies parallel to reality itself'. However, in what sense *langue* might 'lie parallel to reality' is not at all clarified in Saussure's analysis (Giddens 1990: 16). One source of this difficulty is that both signifier and signified are purely cultural phenomena as is their relationship with each other. Any idea of the importance of humanity's relationship with the physical world is ignored due to the arbitrary nature of the sign (Gosden 1994: 48). Giddens emphasises another related problem:

"The identity of the 'Geneva-to-Paris train' cannot be specified independently of *the context in which the phrase is used*; and this context is not the system of differences themselves, such as Saussure mentions, but factors relating to their use *in practice*. Saussure implicitly assumes the practical standpoint of the traveller, or the time-tabling official, in giving the identity of the train; hence the 'same' train may consist of quite distinct engines and carriages on two separate occasions. But these do not count as instances of the 'same' train for a railway repair engineer or a train-spotter" (ibid: 16).

What this criticism illustrates is that no system can be completely self-referential, it only gains meaning through association with circumstances external to it. Saussure is therefore caught, on the one hand, formulating a theory which in essence has no

relation to the real world and is thus inherently idealistic, yet, on the other hand, cannot but help include, however implicitly, the world of objects and events if it is to mean anything. This last point is particularly true in the case of artefacts of a predominantly functional nature. Their meaning is intrinsically tied to the practices with which they are associated, with their interaction with the material world. These are, then, some of the problems confronted if we attempt to extend Saussure's approach to help us understand the artefact, obstacles which emerge both from the analysis of language itself and its relationship to the world. Yet, moving away from Saussure's work in particular, we continually discover that any method based on the explication of language encounters major complications when it is used to interpret the artefact, complications that arise due to fundamental differences between language and material human products. Even those theorists that do see material culture as in some sense a text to be read admit that there are limits to this analogy. To understand the specific nature of these difficulties let's now proceed to discuss the thoughts of those who have confronted the issues in this area.

The Aesthetics of Architecture

As was pointed out at the beginning of this section some work on the differences between language and material objects has been undertaken within the field of architecture and among the most notable is that of Roger Scruton. In his *Aesthetics of*

Architecture Scruton argues that all aesthetic experiences are centred around processes of imaginative attention, processes that begin with our confrontation with the artistic object. Consequently imaginative attention is intrinsically linked to and determined by the object in hand and must, therefore, be understood in these terms. To substantiate these claims Scruton spends some time analysing the inadequacies of applying modes of understanding that originate outside this context, most especially psychoanalysis and Marxism. Ultimately he implies that aesthetic experiences are self-referential in character and each art form brings with it its own type of imaginative attention, architecture being, of course, one such art form. For Scruton “the ‘meaning’ of architectural forms [is] somehow ‘immediate’, involved in the perception of the building, and intrinsic to the object of that perception” (Scruton 1979: 157). Yet if this assertion is true, he asks, “do not words have meaning precisely in [this] way, intrinsically, a meaning which is grasped in hearing and understanding them, and which is not reducible to any unconscious origin or to any effect towards which their utterance is a means?” (ibid: 157). After a lengthy discussion, however, the notion that architecture constitutes a language is firmly rejected - why?

Scruton begins his argument by explaining how such a misconception has come about. To begin with he believes that due to the presence of certain similarities between architecture and language some theorists have taken the unwarranted step of seeing this as evidence of a close tie between the two. Foremost among these language-like features is the occurrence in architecture of conventions and rules. Scruton argues that

architecture does indeed appear to have a 'syntax' so that a building whose details are correct in themselves can even so form a disjointed whole. However, in certain cases departures from the maxims of composition need not result inevitably in 'nonsense' as they would do in language, they can lead to aesthetically meaningful outcomes; "the departure becomes meaningful because of the order against which it is set. It is in the context of rules and conventions that such 'free gestures' are able to convey expressive intentions" (ibid: 172). Consequently, "the meaningfulness of architectural forms cannot be explained merely through the obedience to rule, and that the importance of rules is misrepresented by the linguistic analogy" (ibid: 172). But he goes on to say that;

"it is important to see that ... 'meaningfulness' ... is a quality which may attach not just to the whole of an architectural composition, but also to its parts, and that there is often a dependence of meaning between part and whole and between whole and part which is not unlike the semantic dependences observable in language ... The details themselves impose a possibility of organisation" (ibid: 173).

Therefore, "this mutual dependence between part and whole, and the sense that a 'significance' might arise from its operation, is the single most language-like feature of architecture" (ibid: 173). Yet, states Scruton, what many people have conceptualised as architecture's language is in fact its 'style', the two are quite distinct "for 'style' connotes an order which is not the order of 'syntax'. A style creates harmony where no syntax could apply" (ibid: 174). He illustrates this point by proposing that meaning

is conferred by syntax with respect to wholes, whole structures, an incomplete structure is meaningless. The same is not true of an “incomplete building [which] can manifest stylistic unity and all the meaning which derives from that” (ibid: 174).

The force of Scruton’s assertions is somewhat weakened by his rather confused approach to language generally and to semiology in particular. As Michael Rustin points out, at the beginning of the *Aesthetics of Architecture* Scruton acknowledges both the representational and expressive aspects of language, but later, when he is explicitly contrasting architecture with language, language is viewed only along referential lines (Rustin 1985: 25). However, as we have already seen, Saussure approached meaning through difference not representation. Therefore by making the rather obvious point that buildings are not propositions, that they cannot be ‘true’ or ‘false’, Scruton does not instantaneously negate the theory of architecture as language. Concomitantly, by denying the validity of methodologies that have their origins beyond architecture Scruton is forced back into taking a self-referential stance towards architectural understanding. Consequently, not only are other disciplines denied an input into our knowledge of buildings, but the reverse may also be inferred - both positions seem equally nonsensical.

An altogether more coherent case stressing the limitations of applying a semiological methodology to architectural structures is put forward by Alan Colquhoun in his *Essays in Architectural Criticism*, in particular with regards to Saussure’s notions of

synchrony and diachrony. To this end Colquhoun lists four distinctive properties intrinsic to aesthetic systems, but not to language:

“1. In language, change occurs in one part of the system at a time. In aesthetic systems, change often occurs in the whole system, e.g., the change from Gothic to classical architecture, or from eclecticism to modern.

2. In language, change is always unintentional. In aesthetic systems, change is always intentional (though the intention may not be rationalised).

3. In language, the existence of precise perceptual degrees of difference in the phonic object is relatively unimportant, since it is sufficient for one word to be different from another for differences in meaning to adhere to those two words ... In aesthetic systems, however, precise degrees of difference are important - the difference between the interval of a third and a fifth in music, for example. In music, the ability to distinguish degrees of difference is noted to make a structure which is interesting in itself and to create meaning ... What are interesting in language are the meanings that are attached to phonic objects, not those objects themselves.

4. De Saussure discusses language as being analogous to economic exchange: ‘It is not the metal of a piece of money that fixes its value’. But in an aesthetic system using metal, it is precisely the intrinsic quality of the metal that is important” (Colquhoun 1991: 130).

It can be seen that it is the first two points in particular which have the most direct implications with regards to synchronicity as a methodological approach. Now, whatever the adequacy such a position holds in relation to the investigation of

language, Colquhoun believes firmly that it is not sufficient by itself with regards to an understanding of aesthetic systems. As he explains; “because the changes which occur in aesthetic systems are revolutionary and intentional, these changes are directly related to ideology, and ideology can only be understood in a historical context” (ibid: 131). Consequently, diachronic modes of inquiry cannot be overlooked according to Colquhoun, a proposal that appears entirely justified.

The latter two of the points quoted above, though not given as much attention by Colquhoun, are, to my mind, as significant if not more so than the former two. Here we find the assertion that, because of their sensual existence, aesthetic systems are interesting in themselves. Not only have they the capacity to refer beyond their own circumstances, that is act as a signifier, they also possess inherent qualities which can be acknowledged due to their very constitution. A related aspect is that in many cases we find that specific parts of a building, together with the building as a whole, are constrained by functional and structural factors. Consequently, as signifiers their arbitrary nature is in some way compromised, the assertion that the medium is not the message cannot go unchallenged. We shall return later to this important question, that is what role does the physical make-up of an artefact play in its possession and transference of meaning?

Langer on language

The final study that we shall now turn to is that undertaken by Suzanne Langer. Langer's overall project appears to revolve around an attempt to extend the bounds of rationality beyond the confines of discursive practice, beyond language, to those areas that have traditionally been perceived of as primarily emotive and therefore irrational. Despite the presence of some questionable assertions concerning the nature of language she does make a few obvious, but nevertheless important, distinctions between what she terms discursive and presentational symbolism. All forms of symbolism are by their very nature unlike the objects they stand for and Langer highlights a distortion which is often overlooked with respect to language. To illustrate this point she uses the statement 'A killed B' and explains that;

“the event which is ‘pictured’ in the proposition undoubtedly involved a succession of acts by A and B, but not the succession which the proposition seems to exhibit - first A, then ‘killing’, then B. Surely A and B were simultaneous with each other and with the killing. But words have a linear, discrete, successive order; they are strung one after another like beads on a rosary; beyond the very limited meanings of inflections, which can indeed be incorporated in the words themselves, we cannot talk in simultaneous bunches of names” (Langer 1967: 80).

Therefore, “all language has a form which requires us to string out our ideas even though their objects rest one within the other; as pieces of clothing that are actually

worn one over the other have to be strung side by side on the clothesline” (ibid: 81). As we noted at the beginning of this chapter Saussure recognised that even within a synchronic framework time is not absent due to language’s sequential character; here Langer is emphasising a related notion.

To complement this sphere of discursive symbolism Langer also proposes one of presentational symbolism. This, she believes, has its origins in our organs of perception which act so as to impose an order upon the chaos of sense-impressions that we continually receive. This Kantian line of argument, (one that, incidentally, bears a striking resemblance to that of Scruton’s some forty years later), develops as follows: “the abstractions made by the ear and the eye - the forms of direct perception - are our most primitive instruments of intelligence. They are genuine symbolic materials, media of understanding, by whose office we apprehend a world of *things*, and of events that are the histories of things” (ibid: 92). It is at this point that we confront the major distinction between these two types of symbolism. Langer goes on;

“visual forms - lines, colours, proportions, etc. - are just as capable of *articulation*, i.e. of complex combination, as words. But the laws that govern this sort of articulation are altogether different from the laws of syntax that govern language. The most radical difference is that *visual forms are not discursive*. They do not present their constituents successively, but simultaneously, so the relations determining a visual structure are grasped in one act of vision. Their complexity, consequently, is not limited, as the complexity of discourse is limited,

by what the mind can retain from the beginning of an apperceptive act to the end of it” (ibid: 93).

It is this non-discursive symbolism which creates order from the ‘blooming, buzzing confusion’ that confronts us every second of our waking life and in so doing provides a conduit for the expression of ideas which are not readily translated into linguistic terms.

The sequentiality of discursive symbolism brings with it another consequence. Speech and writing are formed out of signs, the signifiers of which are separated by time and space. A painting, for example, can also be said to be composed of elements distinguished by light, colour, tone, line, hue, etc., but if these are seen as signifiers what are their associated signifieds - what do the dark bits of paint mean in an abstract painting? The very possibility of identifying distinct elements is often denied - where do the yellow areas of Turner’s later paintings ‘begin’ and ‘end’? This form of reasoning is extended by Langer to cover all non-discursive objects of experience, (although her examples are exclusively aesthetic), to further her case that ‘intuitive’ knowledge “is itself perfectly rational, but not to be conceived through language - a product of that presentational symbolism which the mind reads in a flash, and preserves in a disposition or an attitude” (ibid: 98).

Furthermore, according to Langer presentational symbolism “never breaks faith with logic in the strict sense” for “rationality is the essence of mind, and symbolic

transformation its elementary process. It is a fundamental error, therefore, to recognise it only in the phenomenon of systematic, explicit reasoning. That is a mature and precarious product” (ibid: 97 & 99). This is a bold stance to take and, as Martin Hollis indicates, “logic in the ‘strict sense’ (whatever that may be) requires the notions of well-formed formula, truth and falsehood, contradiction, and so forth which are notably absent in music”, paintings, sculpture, etc. (Hollis 1986: 39). Langer’s theories cannot, therefore, be accepted wholesale, but Hollis’ criticism should not discourage us from acknowledging the importance of much of what is discussed above and these aspects will be re-evaluated in the penultimate chapter.

Before moving on let’s take this opportunity to highlight those ideas that have so far emerged in this chapter which may be of some relevance to us in our inquiry into the artefact.

1. Both Scruton and Langer make the point that our understanding of non-discursive objects is in some sense immediate; our perception of them is not, as it is with writing and speech, directed in a linear fashion starting at one particular spot and ending at another. Perception and thus understanding has no predetermined course along which to move.

2. Both these theorists dismiss the notion that a rigid syntax exists with regards to non-discursive phenomena, although for different reasons; Scruton, because deviations from the rules and conventions of composition within architecture can still be

‘meaningful’; Langer, because it is difficult, if not impossible, to define the separate units to be ordered.

3. Here we encounter a further issue, the actual nature of the object being analysed. Certain human products can be dissected into specific constituent parts, buildings being an obvious example, but also many artefacts such as staplers, paintbrushes and sunglasses. However, as we have seen, the same cannot be said of some complex objects like paintings or of simple things like bricks. Any investigation of the artefact must, therefore, allow for this diversity in the actual form of the object.

4. Related to this last point is the fact that, as all three theorists recognise, both parts and wholes can be important in themselves, it is not just their difference from other parts or wholes that is of significance as Colquhoun illustrates with the example of music.

5. The material or materials used in the making of the artefact have a role to play; a cup made of china may be seen to possess a different meaning from a similar vessel made from silver.

6. Artefacts may have several ‘levels’ of meaning beyond the symbolic; the structural and functional being the most obvious. Consequently, as Langer emphasises, artefacts may be able to convey meanings that cannot be expressed in language.

The Archaeological Record

The last area that we shall look at with respect to the relationship between artefacts and language is archaeology. The theoretical debate over the nature of this association has recently expanded quite dramatically, therefore we shall confine ourselves to discussing some of the most representative and, I believe, fruitful contributors. Archaeology, probably more than any other discipline, confronts the need to interpret material culture as a matter of course, there often being very little else remaining of previous societies to investigate. This physical evidence lends itself to being compared to linguistic phenomena, especially text, and archaeologists often refer to it as the archaeological record. The way in which the problems of viewing material objects along linguistic lines have already been seen from the perspective of those occupied with essentially aesthetic considerations, let us now see how archaeological theorists approach this complex issue keeping in mind the points we have already made.

Michael Shanks and Christopher Tilley are among the leading lights in recent British theoretical archaeology, establishing their credentials with two books originally published in 1987, *Re-Constructing Archaeology* and *Social Theory and Archaeology*. In the latter we come across the assertion that material culture can be viewed as a type of writing;

“in an oral culture”, they argue, “it would seem to be quite plausible to regard material culture as a communicative medium of considerable

importance for transmitting, storing and preserving social knowledge and as a symbolic medium for orientating people in their natural and social environment because of the relative permanence of material culture *vis a vis* speech acts. So material culture can be regarded in oral societies as a form of writing and discourse inscribed in a material medium in just the same way as words in chirographic and typographic cultures are inscribed on a page” (Shanks & Tilley 1987: 96-7).

After proposing that material culture is akin to writing Shanks and Tilley take the obvious next step and propose that it acts as communicative structured sign system. However, the acceptance of the semiological model is not immediate and total for they question to what degree material culture and language are alike, whether material culture is a supplement to language and if material culture constitutes a purely self-referential system.

To the first of these questions they suggest that “it would seem best to regard material culture as forming a system of discourse which has a relative degree of autonomy from language, a second order type of writing which shares some essential features with linguistic systems while at the same time not being directly assimilable to, or reducible to, language” (ibid: 99). What, therefore, are the similarities and differences between material culture and language according to Shanks and Tilley? A major distinction that they stress ensues from the materiality of artefacts; as physical objects the processes of production and consumption are logically implicated. As such, it is argued, they are involved in a distinct form of practice and thus occupy a unique place in the overall

symbolic system. Consequently, material culture cannot be said to merely reflect the significative structures of language in another form for it literally constitutes a reified, objectified signifying medium and this shift into the physical realm entails particular factors.

Up to this stage Shanks and Tilley have operated within an essentially Saussurian framework, but they then move on to incorporate the work of Jacques Derrida, especially his extension of Saussure's ideas concerning the ambiguity of the sign. As we noted earlier Saussure believed that this ambiguity is established in a system of difference and Derrida merely extends this argument to its logical conclusion; if meaning is a matter of difference rather than identity then language cannot not be said to form a closed system, therefore the meaning of a sign is not fixed. Consequently, Shanks and Tilley propose, through their reading of Derrida, that a sign can possess "a plenitude of meaning by virtue of its relation to other signs - [hence] we arrive at what might be termed the *metacritical* sign: the sign whose meaning remains radically dispersed through an essentially open chain of signifieds-signifiers" (ibid: 102). The job of the archaeologist, then, is to uncover the structures within which the metacritical signs are embedded, material culture being the embodiment of such signs. Artefacts are, therefore, a collection of observable presences, visible indicators beneath which lie;

"the absences, the co-presences and co-absences, the similarities and the differences which constitute the patterning of material culture in a

particular spatial and temporal context. The principles governing the form, nature and content of material culture patterning are to be found at both the level of micro-relations (e.g. a set of designs on a pot) and macro-relations (e.g. relationships between settlement and burial), but they are irreducibly linked, each forming a part of the other” (ibid: 102-3).

But what is it that is actually being signified? Ultimately, because the production, use, exchange and consumption of artefacts occurs within a social matrix it is social relations that material culture signifies and;

“the form of social relations provides a grid into which the signifying force of material culture becomes inserted to extend, define, bolster up or transform that grid. The social relations are themselves articulated into a field of meaning partially articulated through thought and language and capable of reinforcement through the objectified and reified meanings inscribed in material culture” (ibid: 103).

However, this should not be taken to mean that material culture just provides a different manner of expressing that which could be said through language. For Shanks and Tilley “the importance of material culture as a signifying form is precisely its difference from language while at the same time being involved in a communication of meaning. Material culture forms part of the social construction of reality in which the precise status of meaning becomes conceptually and physically shifted from one register to another: from action to speech to the material” (ibid: 104). Shanks and

Tilley's views on the relationship between language and material culture are summed up in this final quotation:

“Conceived as a form of communication [material culture] constitutes a form of ‘writing’ and is located along structured axes of signification. We are not attempting to argue that material culture, in a manner analogous to language, directly represents things, features or concepts in the social world, but that it is ordered in relation to the social. The structure of this ordering is of vital significance, material culture is polysemous, located along open systems of signified-signifiers or metacritical signs. This means that we can never exhaust or pin down its meaning once and for all” (ibid: 117).

How, then, does this aspect of Shanks and Tilley's work relate to the points already raised in this chapter concerning material culture's relationship to language? What has emerged, hopefully, from the prior explication is a perception of material culture as composing one of a number of symbolic fields which together combine to form a meaningful social reality. As such it shares a number of similarities to language, but also some distinct characteristics; it can be viewed as simultaneously simpler and a more complex than language. Specifically, following Saussure, the meaning of an artefact emerges from its position within paradigmatic and syntagmatic relations, yet, furthermore, these are themselves embedded within spatial and temporal systems. Therefore, material culture can only be understood once it is ‘contextually situated’ within two related frameworks:

“First, explanations must be related to the field of internal relations of individual social totalities, and this invalidates cross-cultural approaches. Second, they must be contextually situated in the spatio-temporal moments of the totality ... Material culture only has significance within the context of a particular social totality and the structures, structuring principles, conditions for social action and the nature of social practices which will differ from one particular case to another” (Shanks and Tilley 1994: 132).

Meanings are then fixed in this respect, but not immutably so as these totalities or systems are open-ended; there are no permanent one-to-one relations between signifiers and signifieds, between artefacts and meanings. This instability ensures that change is forever a possibility, meanings as well as artefact design are open to transformation, although they are more usually reproduced. What does not follow, Shanks and Tilley believe, is that they are proposing an essentially relativistic theory - open-ended systems allow slippage, but not a free play of meanings. Artefacts therefore form “a network of resistances to theoretical appropriation” (ibid: 250).

The importance of semiological insights for Shanks and Tilley is obvious; while acknowledging that material culture possesses qualities not found in language the similarities they do share appear to be of more consequence so justifying such an approach. How, then, do they carry out an analysis of material culture based upon semiology? The first obstacle to be overcome is the one recognised by Scruton and Langer, what constitutes the signs to be investigated? In their two most notable pieces

of research they attempt to master this problem by concentrating upon the patterns inscribed on artefacts, rather than upon the artefacts *per se*. So in one project they analyse the marks found on pot shards around the mouth of a Swedish megalithic tomb and in the other they compare the designs found on contemporary Swedish and British beer cans (ibid: 155-71 & 172-240). Both sets of designs, because of their non-discursive nature, have to be broken down into distinct units, into signs that can be studied. With respect to the pots two overall types of designs are distinguished to be of significance; bounded, “having lines or boundaries on all sides with or without internal infill, e.g., lozenges”, and unbounded, one that “serves to break up the continuous or empty space of the vessel surface without entirely enclosing any area of it, e.g., zig-zag lines” (ibid: 157). For the beer cans seven major variables are distinguished including those such as colour, surface division and field orientation of words. However, in both cases the justification for the choice of these aspects is not established, the reasons why the categories of bounded and unbounded, for example, are seen to be of importance are not made explicit. Of course, this is not to deny that such an approach can be fruitful and indeed Shanks and Tilley’s results are interesting, yet the somewhat arbitrary nature of the first step of their procedure cannot be ignored. On the other hand such a method does allow room for the founding of a multiplicity of meanings, an outcome prescribed by their theoretical writings. However, this does lead on to a particularly important problem. While agreeing that artefacts can possess a plethora of meanings there has to be a limit to their interpretation yet the only such restriction Shanks and Tilley provide is the rather

vague notion of a 'network of resistances'. Consequently, it is difficult to see how comparisons between the fit and unfit interpretations can be made, how we can identify the most appropriate.

Such difficulties are due, in a large part, to the apparent preoccupation with the semiological aspects of the artefact and the problems encountered in trying to break down non-discursive objects, presentational forms, into carriers of discrete signs. Concomitantly, this occurs at the expense of other qualities; functional and structural characteristics, for instance, which are seemingly eclipsed by this concentration on symbolism. One of Shanks and Tilley's main aims is to overcome established analytical traditions within archaeology which err heavily towards a form of functional determinism with regards to the interpretation of artefacts. As they rightly point out function can never determine the final form of an artefact, there are always an infinite variety of possible shapes that an object can take, therefore choice is always involved in its production. However, Shanks and Tilley appear in danger of swinging the pendulum to the other extreme, stylistic considerations becoming paramount and unconstrained by non-socio-cultural factors. What we are encountering here is one element of the style versus function debate, one that, being outside the scope of this chapter, we will return to later. What can be noted at this stage is that an extreme reading of Shanks and Tilley, with its emphasis on symbolism, is endangered by the more material qualities of the artefact. Such qualities, for example the possession of sharpness, seem to ground the artefact beyond its symbolic context. Therefore, the

multiplicity of meanings applicable to an artefact goes beyond those provided by the symbolic so that our understanding of them will need to draw on techniques other than those of a semiological ilk, (this assertion will be substantiated shortly).

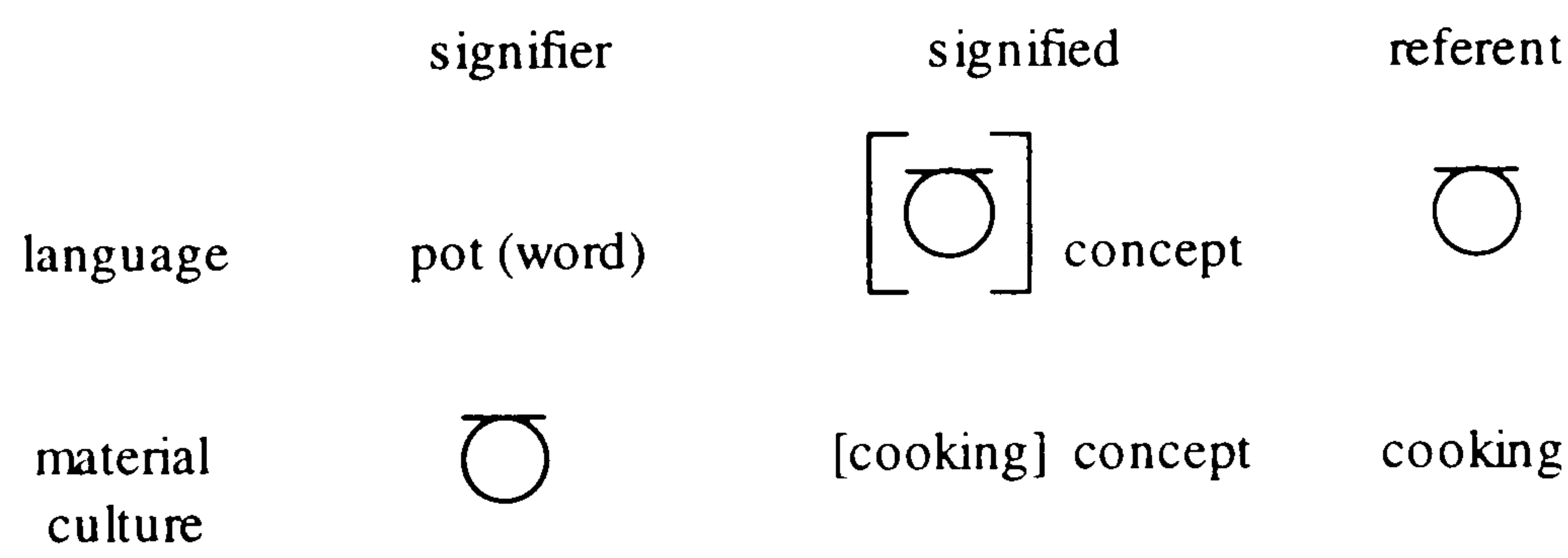
Ultimately it seems that Shanks and Tilley seem to be caught within an approach determined by the analogy of material culture as writing, an outlook directed by their emphasis on surface design. Whilst they readily acknowledge that other factors are at play other than the symbolic these are overshadowed by a preoccupation with semiological concerns. Two important consequences emerge from this aspect of their work. Firstly, we must appreciate the complex nature of the artefact, its meaning lies on a number of different levels the symbolic being just one. Secondly, a fuller understanding of the network of resistances is required so that our interpretations can be better focused.

Hodder

So far in this chapter we have defined some of the factors which appear to distinguish language from material culture. In the work of Shanks and Tilley a number of these were acknowledged, but were eventually seen to be of insufficient importance to deny the efficacy of an essentially semiological or post-structuralist approach. However, in consequence, what transpired was a procedure placing such an emphasis on the purely

symbolic that other characteristics were to all intents and purposes neglected. A more adequate strategy has to give due consideration to the diverse aspects contained within the artefact, those that follow from its materiality, which conspire to create its unique nature. One theorist that has made a move to accommodate these aspects is Ian Hodder.

Hodder has written extensively on many aspects related to material culture and because a discussion of his work will constitute a major part of the following chapter we shall restrict ourselves to looking at just a few of his observations here. At the beginning of his paper *Material Practice, Symbolism and Ideology* he writes that “if there is indeed a close relationship between linguistic and material culture signs, then we might expect a correspondence of the following sort” (Hodder 1995: 201).



We have already noted that for Saussure at least such a clear link between sign (signifier/signified) and referent is not so straightforward; Hodder’s scheme comes closer to reflecting the semiotics of Charles S. Pierce. Be that as it may, such a correspondence between linguistic and material culture signs can be seen to form the

basis of many post-structuralist archaeological theories including that of Shanks and Tilley. However, argues Hodder, although some similarities do exist between these two types of sign there are also some important differences. Primarily, whereas the association between signifier and signified is arbitrary in language the same cannot be said to occur in material culture for, “in the latter case, the pot in its materiality and use participates in the construction of the signified (the cooking concept). The material culture references are motivated and non-arbitrary” (ibid: 201). Therefore, whereas in language a word is seldom both sign and referent with respect to material culture this is often the norm, so, to carry on the pot example;

“it can be referred to as an object at the same time as having sign functions. It is an object with functional, material and technological constraints and characteristics. Hardness, porosity, friability and so on exist and cannot be seen as entirely independent of the sign properties. The objective, non-arbitrary characteristics of the signifier impinge upon and contribute to its reference potential” (ibid: 202).

Other ‘impingements’ arise, not so much from the make-up of the artefact, but rather from its final form. Pierce proposed a generally accepted three-way typology of the sign. Firstly, we have the sign proper which corresponds to Saussure’s ideas, the relationship between signifier and signified is arbitrary and conventional. Next there is the icon where there exists an actual resemblance between signifier and signified, the most obvious example being representational art, a portrait say. Another illustration, drawn from ethnography by Hodder, describes how “the orientation of the bead and

metal decoration on male and female ears is represented iconically in the angle of the lugs (handles - 'ears') on two types of pot ('male' and 'female')" (Hodder 1989:259). The icon is, therefore, a mixture of both conventional and 'natural' connections between signifier and signified; icons contain a necessary non-arbitrary associations with what they signify.

The relationship between signifier and signified within the index, the final type of sign, is a causal one whereby "daily practice or a pragmatic understanding of the material world creates meaning through experience rather than through cultural codes" (Gottdiener 1995: 12). For example, smoke means fire due to fire usually being the cause of smoke. In many cases, however, the non-arbitrary index can become appropriated by a culture and used as a conventional sign, e.g. a smoke machine can produce smoke in order to signify fire in a play without the causal presence of a fire. A more relevant illustration to our study is the 'status symbol'. In Culler's words;

"as the name itself suggests, these are not just indices of status but symbols of status; though they have some causal or intrinsic relation to the status they signify, they have been promoted by the conventions of a society to the rank of symbol and carry more meaning than their causal or indexical nature would entail. Thus a Rolls-Royce is certainly an index of wealth in that one must be wealthy to own one, but social convention has made it a symbol of wealth, a mythical object which signifies wealth more imperiously than other objects which might be equally expensive, Among the many objects which are indices of wealth

in that they are all expensive, it has been singled out by social usage as a symbol of wealth” (Culler 1985: 98-9).

Therefore, if we perceive artefacts as either icons or indices we must acknowledge that they possess elements which are arbitrary and non-arbitrary, conventional and non-conventional; they are, to varying degrees, motivated signs. Even where signs, of whatever type, are seen to be purely arbitrary it is sometimes possible to trace back their origins to physical or biological characteristics of the environment. Hodder’s own example is that;

“in a region in which there is a strong genetic tendency for people to be right-handed, it is likely, but not necessary, that ‘right’ will be associated with ‘strength’ and ‘dominance’. And since we have only two hands which are opposed to each other on our bodies, it is likely that ‘left’ will be associated with opposite characteristics. Individual cultures may disregard right/left symbolism and others may invert the meanings. But there is liable to be a tendency to incorporate characteristics of the environment in which we live into the fabric of our cultural framework of meanings” (Hodder 1989: 258).

A similar process, it can be argued, may occur with respect to social circumstances. A sexual division of labour could possibly lead to ‘inside’, ‘domestic’ and ‘milk’ to signify woman and ‘outside’, ‘wild’ and ‘blood’ to signify man. Hodder is at pains to point out that;

“there is no necessary determinism being suggested here. The association in practical activity can become codified into abstract conceptions. The structured system of meanings affect the uses to which objects are put. Ultimately it becomes difficult to disentangle whether the sexual division of labour comes before or after the symbolic division between inside and outside. Rather, meaning and use are inextricably linked so that one cannot be studied without the other” (ibid: 259).

The arbitrary nature of the material sign is, therefore, open to compromise in a variety of ways and to varying degrees in both their origins and implementation. There are a number of other distinct differences between language and material culture that Hodder indicates, but for the time being I shall refer to just two more as they relate to certain points already made in this chapter. Firstly, in a similar vein to Langer, Hodder notes that texts are ordered and read in a linear sequence. There is no such order or procedure when dealing with material culture, there are no specified starting points and much of what we sense we do so concurrently. Consequently, in a similar vain to Shanks and Tilley, Hodder believes that;

“material culture often is not a good mechanism for expressing complex and clear messages. It is not a good medium for developing complex abstract arguments. On the other hand, much material culture has obvious functional significance. It is these contexts of use, rather than abstract communication codes, which inform its meanings most immediately” (ibid: 260).

Secondly, material culture can involve the use of the five senses as opposed to just those of sight and sound applied to text. This, again, creates a greater degree of uncertainty in understanding material culture; for example, is the colour of an artefact of greater significance than its texture? However, these three factors, arising essentially from the materiality of artefacts, do not act to limit what we can say about the past. Ambiguity is far from annulled, yet neither is there such a free-play of signifiers and signifieds as was implied in the work of Shanks and Tilley. Ultimately, therefore, Hodder warns that;

“symbolic archaeologists may do themselves a disservice by emphasising the language analogy ..., words have to be read and interpreted but they are organised in such a way as to limit the range of meanings that can be ‘read into’ the text. [But,] in relation to many natural objects, the meanings that can be derived from them are even more highly constrained and non-arbitrary than are meanings in language” (ibid: 266-7).

Hodder’s work, I believe, provides an interesting combination of the points previously made in this chapter whilst simultaneously acknowledging the benefits and limitations following on from the linguistic analogy.

Gosden

Before drawing any conclusions from the work of Hodder and the other theorists mentioned above I would like to return briefly to some comments made by the person from whom we quoted at the very beginning of this chapter, Christopher Gosden. Gosden is particularly wary of applying semiological procedures to the study of material culture, his critique of this approach being situated within a wider debate over, to his mind, the pernicious modern preoccupation with meaning and the simultaneous disregard of our physical involvement in the world. This bias is due to our perceiving humanity as in some way distinguished by our capacity to create and communicate meaning through symbolism, “our humanity is bound up with our meanings” (Gosden 1994: 37). It is not Gosden’s desire to dismiss the meaningful qualities of human life as promoted by structuralism, post-structuralism and hermeneutics, but rather to stress that such approaches cannot provide a full picture of human action in the world. For Gosden, therefore, “in the twentieth century, meaning and symbolic forms have supplanted attempts to create a balanced model of life and thought” ... and “language has become the quintessential symbolic form, providing the model for understanding all forms of meaning” (ibid: 38).

Heavily implicated in this movement has been structuralism in general and Saussurian linguistics in particular and according to Gosden there has transpired too far from beneficial effects from this tradition. Firstly, there is what he terms the “internal view

of meaning: meaning derives from the relationship between words and concepts rather than the link between people and the world” (ibid: 45-6). Secondly, as already stated, language has become the main paradigm through which all types of meaning are to be understood. The proposal that language is purely self-referential excludes the possibility of understanding how it relates to the external world. However, even if we accept this idea Gosden argues that we cannot extend it to the realm of material culture as artefacts are real rather than ideal; “once symbolic forms are embodied in things they open up new areas of cause and effect from which it is impossible to exclude the external world and concentrate solely on the human mind” (ibid: 49).

Similar problems arise in the work of Derrida, meaning is internal to language although constantly in a state of flux ensuring the existence of no final meaning. This applies not only to signs within a text, but to texts themselves for they too gain meaning from their relations to other texts. They do not, however, gain it from referring to the external world. Gosden acknowledges that such approaches, the post-structuralist in particular, provoke the investigator to accept that there are inevitably a number of different interpretations applicable to their objects of study, but more interestingly, he also believes that the extension of this argument to exclude the relevance of the material world is based on a fear of this world; “a fear that meaning will be grounded in the concrete in the same sense that a ship becomes grounded on a sandbank, that the rolling swell of signification will cease” (ibid: 59). This, to me, is the most important point that Gosden makes with reference to language. His criticisms of seeing material

culture as analogous to language are ones that we have come across before, rather it is his plea never to exclude the implications following on from the physicality of our environment that must be heeded.

Conclusion

In this chapter we have discussed the work of a number of theorists whose concerns are somewhat varied yet they all share a specific characteristic, physicality. The degree to which these phenomena can be studied through an essentially linguistic paradigm can be seen to be dependent upon the amount of importance placed upon physicality by each of these thinkers. Each one acknowledges that, to greatly varying extents, language and material culture share certain similarities, but none go as far as to propose that they are in all respects identical for the materiality of the latter brings with it unique implications. Both language and material culture are viewed as meaningfully constituted and meaningful to those that come into contact with them, but the nature of this meaning is seen as somehow affected by the medium in which it is embedded. To extend Gosden's analogy our ship may be thought of as running aground in different seas. As Shanks And Tilley point out, "all communicative media from the patterns on a pot to television and video not only transmit information but also form, package and filter it. If the medium doesn't actually constitute the message it certainly alters it" (Shanks & Tilley 1987: 96). So the same message is in some way

modified as a consequence of how it is represented, however, material culture should not be viewed as just another medium for the transference of meanings which could just as adequately be expressed in language. Rather, it should be seen to offer a distinct channel for communication that can both transmit certain information more effectively than language and offer a means that can handle forms of meaning that language cannot.

If this is the case then an argument which asserts that literate cultures are by implication more dynamic than non-literate ones becomes questionable. This is, of course, the position taken by Claude Lévi-Strauss who makes the distinction between 'cold' oral cultures and 'hot' literate cultures. Yet is such a scheme possible, have there ever been purely oral cultures? Homo Sapiens have always enjoyed the use of objects of their own making, objects that have meaning for them and so, consequently, such an assertion appears misplaced. Related to this is the fact that the possession of literacy does not by itself assure an increase in the rate of development of a society or, at least, there is no absolute correlation between levels of literacy and degrees of development. Since the thirteenth century the most literate country in Europe has been Iceland - a state that today can boast the highest ratio of bookshops to citizens in the world - yet it would be difficult to argue that Icelanders have been happier and more prosperous than their fellow Europeans for the past eight hundred years (Clanchy 1993: 9). The superiority of the written word should not, therefore, be taken for

granted and, concomitantly, neither should the artefact be under-estimated as a medium of communication.

What, then, are the important aspects possessed by material culture which have emerged as a consequence of its comparison to language in this chapter? One of the most significant factors is also one of the most obvious; artefacts confront us in their totality, we perceive them in one moment. Furthermore, we can gain awareness of a great many of them through a number of senses simultaneously - I can see, touch and smell a carved piece of wood all at the same time. This evident truth entails important consequences. The possession of multiple dimensions engenders the possibility that meanings can be embedded within each one, a variety of meanings may, therefore, be held synchronically, and these may be complementary or contradictory. It is this aspect of the artefact which ensures its more complex nature over and above speech and writing. The problem which confronts the person trying to come to grips with the artefact is which, if any, of its characteristics is the most significant with respect to its meaningfulness, (not forgetting the difficulties encountered in distinguishing between each characteristic). We have seen that Shanks and Tilley dealt with this uncertainty through their choice of surface patterns as the object of study, yet, and they may not be the last to deny this, what of, say, the significance of the beer cans shape, size, the materials used in its construction or the methods of production? However, not only do we find difficulties in assessing the relative importance of an artefact's different qualities we may also find problems in the assessment of a single characteristic. In both

cases there exists no pre-given order through which an analysis can proceed - neither a point from which to start an investigation nor a point at which it is to be terminated. In essence artefacts are not sentences or texts, they do not present meaning in the form of distinct units laid out in a sequential, linear fashion.

Returning to the relationship between medium and message we noted above that different media can either change the nature of the message or have the ability to carry unique forms of meaning. In language the actual character of the signifier is of no real importance as long as it is recognisably different from the other signifiers within its system. Artefacts, on the other hand, especially those that can be classed as iconic or indexical, may depend heavily on representation rather than difference. Their meaning is reliant on their similarity to other phenomena in the material world so that artefacts as signifiers are, therefore, in certain instances, of a far less ambiguous character than 'pure' signs. Also, the materials from which the artefact is made and the method of construction can have significance in relation to the meaning of an artefact. Another form of constraint on the signifying potentiality of the artefact can ensue from its capacity to act functionally, an object's ability to be used in a particular way helps to limit the amount of interpretations that can be applied to it and as such may act as an aid in this process.

These, then, are some of the restrictions on meaning, but whose meaning is it that emerges from an investigation of the artefact? In the earlier chapter concerned with the

concept of objectification the argument was forwarded that in the act of manufacture humans incorporate an element of their own social being into the product. Consequently, if we are to recapture anything at all it will be the social aspects involved in the artefact's production and use, not an individual's idiosyncratic thought processes. In any case, the possibility of realising such an enterprise with respect to non-contemporary objects is far more realistic than any investigation to uncover the original thoughts of an individual artisan. This is because, while the 'author' will quite literally be dead, there exists the likelihood that other material evidence will remain so helping the reconstruction of the social context within which the artefact was used. However, even when dealing with recently made artefacts the intentions of the maker are but one aspect in the constitution of its meaning as the interpreter's own intentions and practical contexts are necessarily involved - a contemporary act of distancing occurs once the object enters into common currency.

However, two points need to be made. Firstly, this process is not one of 'decontextualisation', but rather one of recontextualisation; it is nonsense to talk of anything being decontextualised as nothing exists in a vacuum. Secondly, the meaning of an artefact can never be freed totally from the social circumstances of its manufacture and, by implication, its makers/designers for it is they which helped in the formation of the object and, of course, it is the object which plays a central role in the act of interpretation. Consequently, the moorings are never quite broken, but the painter can be exceedingly long. What now needs to be assessed, therefore, is the role

played by context in the formation of meaning and this will be the task of the next chapter.

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Artefacts in [Con]text

Introduction

In the previous chapter we highlighted a number of qualities exhibited by material culture which distinguish it from language. These unique characteristics have repercussions for all investigations into how meaning is carried by artefacts and the consequent interpretation of this information. The major obstacles that prevent any one to one comparison between material culture and language were seen to emerge mainly from the physical nature of the former, the ramifications of the materiality of manufactured objects are profound. Yet these obstructions do not add up to a complete denial of some common ground existing between these two phenomena and an exploration of this area that will constitute the main part of the first section of this chapter, concentrating specifically on the role of context in the production of meaning. To this end an assessment of the part played by context in the works of Lévi-Strauss and Ricoeur shall be undertaken as the implications that flow from these have greatly influenced the ideas of the final theoretician to be discussed in any detail in this study.

Ian Hodder. The notion of context is of prime importance to Hodder in his analysis of material culture, so much so that he calls his method ‘contextual archaeology’.

“In a sense”, proposes Hodder, “archaeology is defined by its concern with context. To be interested in artefacts without any contextual information is antiquarianism, and is perhaps found in certain types of art history or the art market. Digging objects up out of their context, as is done by some metal detector users, is the antithesis in relation to which archaeology forms its identity. To reaffirm the importance of context thus includes reaffirming the importance of archaeology as archaeology” (Hodder 1993a: 123).

The main purpose of returning to Hodder’s work is to appraise how well it can act as a theoretical device in the analysis of material culture as a whole, not just artefacts produced hundreds of years ago. Let’s begin this process, then, by looking at how significant context is to Lévi-Strauss.

Lévi-Strauss out of context

In our look at the work of Saussure we noted how a sign’s value was believed to emerge as a consequence of its position within a structure, individual items possess value only by virtue of their relations to others inside a system, value only exists contextually. For Saussure this system is, of course, *langue* and it is the systematic

quality of *langue* that marks its essential difference from the more disparate side of language, *parole*. These can be seen as analytically independent entities, the form and content of language, and it is by distinguishing between these two aspects that Saussure is able to provide a suitable object of study; semiology can concentrate on the analysis of a static, synchronic and systematic entity which is *langue*, rather than upon the diverse phenomena of individual speech acts that constitute *parole*. But what, exactly, is the nature of this system? We have already noted that a language is composed of distinct signs of an arbitrary character which are constituted through difference; a sign's value depends upon its difference from other signs within the system of which it is a part, it does not relate to anything outside the system. Consequently a language system constitutes a hermetically sealed structure, they are self-contained, a distinct context.

Now one obvious question that springs to mind is to what do these systems and the rules governing them owe their existence, from where do they originate? Unfortunately Saussure is none too sure as to the answer, apparently being split between two possible solutions.

“The dominant view”, explains Simon Clarke, “is the mentalist one according to which language is a psychological reality, seated in the brain, and the linguist explores psychological connections. Linguistics is thus an autonomous branch of psychology. The other view is that language is a collective institution, and so a social reality, and the linguist therefore explains functional connections. In the former case

the linguist is concerned to discover psychological relations between the elements of language, in the latter case the linguist is concerned to discover linguistic relations” (Clarke 1981: 123).

Of those theorists that have followed Saussure down the first of these paths probably the most prominent are the structural anthropologist Claude Lévi-Strauss and the linguist Noam Chomsky. Lévi-Strauss’ justification for extending the semiological approach to his own discipline is that, ultimately, linguistics and anthropology are studying the same thing. As Jenkins describes it;

“if the ‘source’ of the type of order manifested by language is also at the basis of the type of order present in the rest of culture and if this ‘source’ has a constant mode of effectivity, then we are justified in investigating culture as a whole with methods which have been so successful in linguistics, as we expect both language and other sectors of culture to be similarly structured” (Jenkins 1979: 12).

The source referred to here is what Lévi-Strauss terms the unconscious. Unfortunately, he is rather vague as to the exact nature of the unconscious, but the view most often inferred from his work is that it has a natural foundation in the physiology of the brain. The actual relationship between the unconscious and the brain is another unclear aspect of Lévi-Strauss’ theory, although he does seem to suggest that they are structurally similar and, together, operate so as to impose order upon reality, because, after Saussure, phenomena only become meaningful as elements

within a system established via reciprocal relationships of opposition. As he explains further;

“the unconscious ... is always empty - or, more accurately, it is as alien to mental images as is the stomach to the foods which pass through it. As the organ of a specific function, the unconscious imposes structural laws upon inarticulated elements which originate elsewhere” (Lévi-Strauss 1968: 203).

The repercussions of this position are as follows:

“If, as we believe to be the case, the unconscious activity of the mind consists in imposing forms upon content, and if the forms are fundamentally the same for all minds - ancient and modern, primitive and civilised (as the study of the symbolic function, expressed in language, so strikingly indicates) - it is necessary and sufficient to grasp the unconscious structure underlying each institution and each action, in order to obtain a principle of interpretation valid for other institutions and other actions, provided of course that the analysis is carried far enough” (ibid: 21).

The method by which form is given to content is through the application of binary mechanisms, a notion Lévi-Strauss imported from the linguistic research of Roman Jakobson who believed that all languages are organised around systems of difference and opposition. Through uncovering these binary mechanisms, by discovering which are being applied in the composition of a particular cultural system, a greater

understanding of such systems is achieved together with a more comprehensive knowledge of the human mind. Therefore it is not so much the actual units of a system which interests Lévi-Strauss, but the way in which the system is structured, the logic behind all cultural phenomena. Ultimately;

“any culture can be considered as a totality of symbolic systems, the most important of which are language, rules of alliance, economic relations, art, science, religion. All the systems seek to express certain aspects of physical reality and of social reality and, furthermore, the relations between these two types of reality and between the symbolic systems themselves” (Lévi-Strauss in Jenkins 1979: 9).

What is immediately noticeable here is the similarity of Lévi-Strauss ideas to those of Émile Durkheim, both view symbolic systems or collective representations as central to the constitution of society. In their eyes;

“social action is the result of externally constraining rules that are mobilised within collective systems of representations and that impose themselves on the individual. The task of sociology is to study the collective systems which mediate between the individual and the world by orientating and giving meaning to the actions of the individual. For both Durkheim and Lévi-Strauss this meaning is an objective meaning, inherent in the systems of representations, and quite different from the individual’s conscious apprehension of the meaning of the actions in question” (Clarke 1981: 98-9).

However, whereas Durkheim believed that these systems formed a *sui generis* reality over and above the individual Lévi-Strauss, as we have recognised, saw them as having their basis within individual's unconscious. Clarke goes on to explain that the implication of Lévi-Strauss' position;

“is that the social structure is only an expression of the systems of representation, for the social structure is simply the product of a series of individual actions which are orientated and given meaning by the systems of representations. The social structure is thus a projection of the symbolic systems embedded in the individual psyche and has no *sui generis* reality. It is therefore impossible to attempt a sociological explanation of symbolic representations since there is no society outside such representations”. Consequently, “if society is a symbolic order then there can be no reality beyond the symbolic systems which give meaning to social existence. This meaning must therefore be inherent in such symbolic systems, an objective meaning that cannot be related to anything external to those systems, whether to an external nature or an external social structure, on the one hand, or to a conscious apprehension of these systems, on the other” (ibid: 99-100).

What Lévi-Strauss is proposing, among other things, is that context is irrelevant with respect to the meaning of a symbolic system, all circumstances exterior to it can have no bearing upon its meaning, at most all they can do is pollute or distort it.

So we return, again, to a fundamental criticism of the structuralist approach; that in its endeavour to provide a strictly objective procedure it isolates the article of study from

its surroundings to such a degree that we are obliged to see it as intrinsically idealistic in nature. Correspondingly, in Lévi-Strauss' case, the aspiration is to strip away all external factors, the contents of a system, so all that remains is a purely formal structure and it is this which constitutes the objective meaning imminent within the system, being independent of any specific interpretation or utilisation of it. Yet, as we recognised with Saussure's work with regards to his distinction between *langue* and *parole* (a distinction that Lévi-Strauss is essentially applying here), no system can be understood as pure form, defined without reference to elements external to it. That is to say the meaning of any word, of any cultural phenomenon, cannot be circumscribed autonomously of the context within which it occurs and is used; and this context is not just the system of differences themselves, as Lévi-Strauss often proclaims it to be, but rather includes all those elements associated to the item's use in practice. Ultimately, structuralism can be seen to "spring from the ironic act of shutting out the material world in order the better to illuminate our consciousness of it" (Eagleton 1986: 109).

We are, therefore, left with a choice, either to reject the structuralist procedure wholesale or attempt to modify it by acknowledging and incorporating the criticisms we have highlighted. A number of theorists concerned with material culture have, following Ricoeur, attempted the latter. Ricoeur believes that structuralism provides a rigorous methodology but that is all, for it is when it is extended beyond this level to that of a general philosophy that problems arise. Structuralism offers an explanation of how meaning is possible, it does not explain the nature of meaning. Ricoeur argues,

therefore, that it should be integrated within a broader outlook and the outcome is a structuralist methodology assimilated within a hermeneutic philosophy. We have already come across a number of theorists agreeing in principle to such an approach, i.e. Shanks and Tilley, so let us turn to the work of Ricoeur and discuss how it applies to the analysis of material culture.

Ricoeur in and out of context

Ricoeur draws a distinction between a concern with language systems and discourse, the former being confined to the analysis of signs, in other words semiology or semiotics. This constitutes a legitimate area of research providing valid results, but it leaves untouched a large part of language which Ricoeur labels discourse. The fundamental unit of discourse is the sentence which, though composed of signs, cannot be analysed in the same way for as a synthesis of signs the sentence acquires unique characteristics:

“The sentence is not a larger or more complex word, it is a new entity. It may be decomposed into words, but the words are something other than short sentences. A sentence is a whole irreducible to the sum of its parts. It is made up of words, but it is not a derivative function of its words. A sentence is made up of signs, but is not itself a sign” (Ricoeur 1976: 7).

One distinctive feature of the sentence, and discourse in general, is its dialectical nature, its form as a concrete polarity of event and meaning. In speech the sentence has a temporal, evanescent quality, it exists only at the moment of utterance, as an event it is ephemeral. However, this is not the whole story as an act of discourse “may be identified and reidentified as the same so that we may say it again or in other words. We may even say it in another language or translate it from one language into another. Through all these transformations it preserves an identity of its own which can be called the propositional content, the ‘said as such’” (ibid: 9). It is the meaning that endures. As Thompson further explains, “the meaning of a sentence is a product of a complex operation constituted by the predicative act. A sentence has a synthetic structure in which a quality, a relation or some other aspect is predicated of a subject. The predicative act endows the sentence with a specific meaning” (Thompson 1990: 176). Ricoeur then makes an additional distinction as he argues that the notion of meaning allows two particular types of interpretation which mirror the main dialectic between event and meaning. Associated to the event side of the equation is the ‘subjective’ aspect of meaning, what the speaker means or intends to say. On the other side we find the ‘objective’ element of meaning aligned with what the sentence itself means, its propositional content. However, Ricoeur still does not think that he has exhausted the meaning of meaning and argues for yet another dialectic within the objective side of discourse. After Gottlob Frege he distinguishes between sense and reference;

“we may mean the ‘what’ of discourse or the ‘about what’ of discourse. The ‘what’ of discourse is its ‘sense’, the ‘about what’ is its ‘reference ... It is a distinction which can be directly connected with our initial distinction between semiotics and semantics. Only the sentence level allows us to distinguish what is said and about what is said. In the system of language, say as a lexicon, there is no problem of reference; signs only refer to other signs within the system. With the sentence, however, language is directed beyond itself. Whereas the sense is immanent to the discourse, and objective in the sense of ideal, the reference expresses the movement in which language transcends itself. In other words, the sense correlates the identification function within the sentence, and the reference relates language to the world. It is another name for discourse’s claim to be true” (Ricoeur 1976: 19-20).

Reference is, therefore, in an important way defined contextually for language only has reference when used - “to refer is what the sentence does in a certain situation and according to a certain use. It is also what the speaker does when he applies his words to reality” (ibid: 20).

Circumstances, however, change dramatically in the transition from discourse-as-dialogue to discourse-as-text, a transition characterised, as we have noted before briefly, by distancing. Distancing revolves around a particular state, one only nascent in dialogue, the detachment of meaning from event, and it is effective on a number of different levels. The most obvious quality of text, the fixation of discourse in a material medium, is the most significant and impacts upon all the other aspects of distancing. According to Ricoeur, “what writing actually does fix is not the event of

speaking but the ‘said’ of speaking, i.e., the intentional exteriorization constitutive of the couple ‘event-meaning’. What we write, what we inscribe is the noema of the act of speaking, the meaning of the speech event, not the event as event” (ibid: 27). Yet this is not to imply that text is merely the fixation of speech, the link between thought and writing can be immediate in the same way as it can be between thought and speech. What are, then, the repercussions of fixation?

One major effect is that the relation ‘writing-reading’ does not mirror the relation ‘speaking-hearing’ as the “dialogical situation has been exploded” (ibid: 29). In spoken discourse the subjective intention of the speaker and the meaning of their conversation overlap to such an extent, due to their simultaneous presence, that the understanding of one is to all extents and purposes an understanding of the other. “With written discourse, however, the author’s intention and the meaning of the text cease to coincide” as the text, as a distinct material reality, escapes the presence of its maker (ibid: 29). Consequently, inscription becomes synonymous with the semantic autonomy of the text, “the text’s career escapes the finite horizon lived by its author. What the text says now matters more than what the author meant to say, and every exegesis unfolds its procedures within the circumference of a meaning that has broken its moorings to the psychology of its author” (Ricoeur 1971: 534). Ricoeur is careful, though, not to commit what he calls the ‘fallacy of the absolute text’, viewing a text as an author-less item. As he says, “it is impossible to cancel out this main characteristic

of discourse without reducing texts to natural objects, i.e., to things which are not man-made, but which, like pebbles, are found in the sand” (Ricoeur 1976: 30).

Just as there is a change in the relationship between the speaker and discourse so there is a comparable change between discourse and hearer:

“Whereas spoken discourse is addressed to someone who is determined in advance by the dialogical situation - it is addressed to you, the second person - a written text is addressed to an unknown reader and potentially to whoever knows how to read. This universalization of the audience is one of the most striking effects of writing and may be expressed in terms of a paradox. Because discourse is now linked to a material support, it becomes more spiritual in the sense that it is liberated from the narrowness of the face-to-face situation” (ibid: 31).

This ‘liberation’ of the text from the dialogical situation and the related eclipsing of the author places a heavy emphasis on the association between text and reader and it is the convergence of these two elements which generates the dynamics of interpretation. What transpires as a consequence of the text’s universalisation is that it opens it up to an infinite number of explications. Another aspect peculiar to the text is that, as a totality, it is irreducible to its constituent sentences. There are, however, different ways of combining sentences, different modes of writing, different forms of literature. Therefore, “language is submitted to the rules of a kind of craftsmanship, which allows us to speak of production and works of art, and, by extension of works of discourse.

Poems, narratives, and essays are such works of discourse. The generative devices, which we call literary genres, are the technical rules presiding over their production” (ibid: 33). Finally there is, to Ricoeur’s mind, the most complex change that occurs in the movement from speech to text.

“Spoken discourse”, as Thompson explains, “always contains some reference to the shared situation of the interlocutors and always offers the possibility of clarifying, by pointing or some other gesture, the referential import of what is said. This link between discourse and ostensive reference is shattered by writing. A text does not refer to features of the situation in which it was produced, but opens up a world and projects a way of being. To unfold this referential dimension of the text, and to relate it to the subject who is ‘metamorphized’ by the text, is the task of the theory of interpretation” (Thompson 1990: 180).

Another element of Ricoeur’s work that needs to be addressed briefly, therefore, is his interpretation theory, a theory influenced by the aspects of distancing just outlined. One aspect of Ricoeur’s approach is that the objective meaning of a text is distinct from the intentions held by its author for, as we have seen, the meaning of what is written eclipses the event of writing and so breaks free of the moorings to the psychology of its author. Concomitantly, this objective meaning cannot be ascertained by an analysis of individual sentences, a text is a structural totality and its meaning is aligned to this whole. Semantics, therefore, offers an inadequate method of interpretation, what is required is a form of hermeneutics. One particular component of this approach Ricoeur calls a ‘guess’, “a naive grasping of the meaning of the text

as a whole”, and, due to the plurivocity of written works, many different guesses of the meaning are possible, a plurality of constructions can occur (Ricoeur 1976: 74). However, although there are no rules for making good guesses there are methods for validating those that are made. As Ricoeur states, “it is always possible to argue for or against an interpretation, to confront interpretations, to arbitrate between them and to seek agreement, even if this agreement remains beyond our reach” (ibid: 79). This is a criterion for assessing the most plausible exposition as “an interpretation must not only be probable, but more probable than another interpretation”, the aim is to validate rather than verify (ibid: 79).

A further repercussion of distancing on interpretation is that the text can be approached in two specific though mutually dependent ways. Firstly, it can be judged as ‘worldless’, a self-contained unit analogous to the closed system of signs Saussure termed *langue*, a method exemplified by Lévi-Strauss’ analysis of the Oedipus myth. For Ricoeur such an approach can provide us with an explanation of the sense of a text, the logic behind the arrangement of the elements which constitute it. Nevertheless, a text is not only a logical set of propositions picked out at random for always implied, even in the work of Lévi-Strauss, is the fact that propositions are meaningful, pointing to circumstances beyond the text. What is required, then, on top of the explanations offered by a structuralist methodology, is a mode of understanding:

“what we want to understand is not something hidden behind the text, but something disclosed in front of it. What has to be understood is not

the initial situation of discourse, but what points toward a possible world. Understanding has less than ever to do with the authors and his situation. It wants to grasp the world-propositions opened up by the references of the text. To understand a text is to follow its movement from sense to reference, from what it says, to what it talks about” (Ricoeur 1971: 557-8).

What Ricoeur calls for, consequently, is a depth interpretation. As Thompson elucidates;

“in undertaking a depth interpretation the reader enters the world of the text, following the movement from sense to reference, from its internal structure to the world which it projects. The reader thereby appropriates the world of the text, where by ‘appropriates’ Ricoeur understands, not an act of possession by an autonomous ego and even less a return to the intentions of the author, but rather an act of dispossession through which one may relinquish a prior self and deepen one’s understanding of oneself and others by virtue of the meaning inscribed in the text. Explanation and understanding are then two phases of a process of interpretation which, while avoiding subjectivism, does not dispense with the subject” (Thompson 1990: 183).

The final aspect of Ricoeur’s work which needs to be confronted due to its impact upon Hodder’s is the former’s extension of his theory to the social sciences. Ricoeur contends that “meaningful action is an object for science only under the condition of a kind of objectification which is equivalent to the fixation of a discourse in writing”

(Ricoeur 1971: 537). This objectification is made possible through the possession by meaningful actions of certain attributes which correspond to those found in speech acts, attributes of distanciation. Therefore, just as the event of dialogue is out-lived by its meaning so the event of doing is out-lived by the significance of what is done. Concomitantly, “like the speech-act, the action-event (if we may coin this analogical expression) develops a similar dialectic between its temporal status as an appearing and disappearing event, and its logical status as having such-and-such identifiable meaning or ‘sense-content’” (ibid: 539). The meaning or ‘sense-content’ of an act can, then, become independent in the same way as a text acquires semantic autonomy. Furthermore, an action can become detached from its agent in a comparable way to a text becoming separated from its author, that is it can have consequences, unintended consequences, unbeknown to those who performed it. Consequently, the meaning of an action is cut loose from the intentions of the acting subject and is thus free to leave its ‘marks’ on time, to bequeath an impression on the flow of events which constitutes human history. “Moreover”, as Thompson explains, “just as the inscription of discourse shatters the narrowness of the dialogical situation, so too action is an ‘open work’: it is there to be interpreted and judged by anyone who can ‘read’, not only by those individuals who witnessed its performance” (Thompson 1990: 184). As Ricoeur himself puts it, “the judges are not the contemporaries, but ... history itself” (Ricoeur 1971: 544). Finally, action, like a text, transcends the social condition of its production because it too is freed from the restrictions of ostensive reference, its importance “may go beyond its relevance to the circumstances in which it occurs. Hence an action ...

may open up new worlds through the actualisation of possibilities which it bears within itself' (Thompson 1990: 184).

Hodder's acceptance of Ricoeur's work is not indiscriminate and rightly so for it would be most optimistic to believe that a theory of the text can be carried over and applied to another discipline unchanged. As mentioned earlier, Hodder notes a number of specific qualities possessed by artefacts which distinguish them markedly from written works, such as their presentational form and their functionality, that make such a transference less than straightforward. However, I would want to go further and suggest that Ricoeur's position is more problematic than Hodder believes. What now needs to be tackled, therefore, are the shortcomings of Ricoeur's work, specifically as it is applicable to an understanding of material culture and the implications this has for Hodder's approach. Hodder terms his own procedure 'contextual archaeology' due to the heavy emphasis placed upon context in the interpretation of material culture. The importance of context in Hodder's work will be discussed shortly, but what of its role with respect to Ricoeur?

This section is entitled 'Ricoeur in and out of context' due to the variable amounts of emphasis placed upon this phenomenon depending on whether it is the sign, the sentence or the text that is being discussed. In relation to the sign the context can be seen to be synonymous with the system of language, a purely formal, closed and

autonomous structure of internal dependencies. Context in this sense provides the conditions for meaning, but not the meaning itself, form not content.

When we move on to the next level of language, the sentence, matters change dramatically. The context of a sentence in the act of speech appears to have two dimensions. Firstly, the sentence itself can be viewed as a context within which the sign is situated. Secondly, and more significantly, in dialogue language can be said to go beyond itself and relate to the world. Dialogue occurs at a specific moment in time and in a specific place, it is a fleeting event involving interlocutors and a message. As discourse the latter possesses reference, “to speak is to say something about something” and;

“the ultimate criterion for the referential scope of what we say is the possibility of showing the thing referred to as a member of the situation common to both speaker and hearer. This situation surrounds the dialogue, and its landmarks can all be shown by a gesture or by pointing a finger. Or it can be designated in an ostensive manner by the discourse itself through the oblique reference of those indicators which include the demonstratives, the adverbs of time and place, and the tenses of the verb. Finally they can be described in such a definite way that one, and only one, thing may be identified within the common framework of reference ... There is no identification which does not relate that about which we speak to a unique position in the spatio-temporal network, and there is no network of places in time and space without a final reference to the situational here and now. In this ultimate sense, all references of oral language rely on monstrations.

which depend on the situation perceived as common by the members of the dialogue. All references in the dialogical situation consequently are situational” (ibid: 87 & 34-5).

The meaning of any dialogue, therefore, is reliant upon the context within which it occurs, the context functions in such a way as to screen the polysemy of words and so reduce the plurality of possible interpretations.

However, “it is this grounding of the reference in the dialogical situation that is shattered by writing” (ibid: 35). The text, as fixed discourse, immediately outlives the event of its production, the event is left behind, and, as a physical object, a written work can be removed from the presence of its author. As such the text’s career escapes the finite horizon which constitutes its creator’s milieu, it becomes detached from the social, cultural and historical circumstances surrounding its production. The text, unlike speech, does not refer to a common situation shared by both writer and reader for they are no longer co-present; rather it refers beyond this ‘narrow’ boundary to the world. In fact it is “thanks to writing man and only man has a world and not just a situation”, a world that is not described directly but alluded to (ibid: 36).

“For us”, Ricoeur argues, “the world is the ensemble of references opened up by the text. Thus we talk about the ‘world’ of Greece, not to designate any more what were the situations for those who lived then, but to designate the non-situational references which outlive the effacement of the first and which henceforth are offered as possible modes of being, symbolic dimensions of our being-in-the-world. For

me, this is the referent of all literature; no longer the Umwelt [environment] of the ostensive references of dialogue, but the Welt [world] projected by the non-ostensive references of every text that we have read, understood, and loved” (Ricoeur 1971: 535-6).

Here we have, therefore, three attitudes towards context which are allied to the three levels of language. The context of a language system is the system itself, one that is virtually present and has no exterior affiliations. In speech the context as the situation of dialogue is implicit in the event and plays a central role in meaning and interpretation. At the level of written discourse, however, the text can be said to be ‘decontextualised’ - context is surpassed and replaced by the world as the central concern. Such a seeming dismissal of context at this ‘upper’ level makes one wonder why Ricoeur’s work is viewed by Hodder as of interest in relation to the latter’s contextualist approach. When Ricoeur dismisses the idea that in reading Greek texts we do not “designate ... what were the situations for those who lived then” the value of his work, to archaeology in particular, becomes questionable.

Before following up these queries a number of related difficulties need to be discussed, difficulties which emerge as a result of Ricoeur’s assertion that action can be treated like a text due to the fact that both can be viewed apart from the social circumstances of their production and their producers. This is of particular importance to Hodder in that he believes that the formation of material culture is an action, a material action as he calls it, like any other human action so that “the forming of a pot or the discarding

of an artefact has a ‘propositional’ content which can be identified and reidentified as the same” (Hodder 1989: 257). Ironically Ricoeur’s proposal that action can be perceived as a text can be seen as an example of a practice that he himself criticised, for just as he saw structuralism as promoting a form of linguistic imperialism, erroneously extending its sphere of influence to areas in which ultimately it was of little or no use so that language became seen as paradigmatic of all human life, this is precisely, in essence, what he himself does. He pushes his analogy too far, action becomes a text not *like* a text, so that when we come to cash this metaphor in we are confronted with certain problems.

Thompson argues that Ricoeur’s proposal is;

“based on a conflation of ‘action’ and ‘action-sentences’, such that certain features of the latter are misleadingly ascribed to the former. The result is that ‘the meaning of an action’ is transformed into an ethereal essence, a ‘sense-content’ which is there and waiting, as it were, to be picked up and re-presented by the interpreter. Ricoeur thereby obscures the extent to which ‘the meaning of an action’ depends upon the way in which it is described; and it is these descriptions (or these creative interpretations) which are transmitted, transcribed and contested in the trace-ridden process of history” (Thompson 1990: 190).

Thompson follows up this criticism by pointing out that if “the meaning of an action depends on how it is described, then it cannot be considered in isolation from social

context, since how an action is described is deeply affected by contextual considerations” (ibid: 191). It does appear questionable that any action or text can be interpreted adequately without any reference to the circumstances surrounding its production as neither are spontaneously created in a vacuum. One aspect of Ricoeur’s argument in support of his position is that whereas in dialogue discourse is addressed to a specific person this is not so with a text, discourse as text is thus emancipated from the conditions of its of creation. But how true is it to contend that texts are not addressed to anyone in particular, that the author, if not writing for a specific person, does not have a certain audience in mind? As such the reception of a text plays a significant role in what is written and how it is written; the audience is perceived to possess certain expectations that need to be met, expectations that are to a large extent shaped by the socio-cultural environment.

Yet this is far from the whole story for texts are not just objects to be read, they are also, in the vast majority of cases, things to be consumed and, it could be argued, only really become texts through this very act. “For example”, writes Marx, “a garment becomes a real garment only in the act of being worn; a house where no one lives is in fact not a real house; thus the product, unlike a mere natural object, proves itself to be, becomes, a product only through consumption. Only by decomposing the product does consumption give the product the finishing touch” (Marx 1974: 91). Most present day texts owe their existence to this ability to act as a commodity, from the most obvious example of weekly magazines to more ‘highbrow’ literature. Texts,

because of their physical nature, can be repeatedly consumed over long periods of time and far from their place of origin, a fact Ricoeur incorporates within his notion of distanciation. This is an important idea to acknowledge, but it in no way prejudices our original point, that texts are written with an audience in mind. Neither does the fact that certain texts may indeed reach outside the immediate circumstances of their production, this is not a limiting criterion, they can at the same time point to the world beyond.

Finally, there is in Ricoeur's work the premise that the adequacy of each interpretation emerges as a consequence of rational argument, the most analytically strong will be commonly accepted as the most valid. But this is to assume that all interpretations are put forward on an equal basis and ignores the fact that just as texts are not produced in a vacuum so too interpretations are not affected by the social circumstances surrounding their elaboration. As Moore explains;

“interpretation is always bound up with social inequality and with domination. Discrimination in society prevents many groups from making an interpretation, either because they are directly denied a platform or because they are debarred from access to the resources - notably education - which would equip them to make interpretations. In many instances, even when they make interpretations they are not heard, they lack an audience” (Moore 1992: 116).

Where do these criticisms leave Hodder, is his work so dependent upon that of Ricoeur that it is undermined by the problems that we have just outlined?

Hodder on context

It can be seen that there are a number of ideas within Ricoeur's work that would readily appeal to a theorist concerned with the investigation of historical artefacts, for example, the notion that a product's separation from its maker and original environment is inevitable yet does not present insurmountable obstacles to their interpretation. But how does Hodder incorporate Ricoeur's theory when there exist such difficulties as have just been outlined, especially the latter's ambivalent attitude towards context?

As was hinted at earlier, although influenced by Ricoeur, Hodder does not accept entirely his views; in fact it could be argued that in his selection and use of ideas he actually confuses or misrepresents Ricoeur's position. However, in doing so, I want to argue, Hodder actually overcomes many of the problems we saw emerging from Ricoeur's enquires. One of Hodder's most frequent remarks with reference to Ricoeur is that artefacts can be seen as analogous to texts. In Hodder's own words;

“the notion of ‘text’ is more appropriate than that of language in the consideration of material culture in its dual role as object and as sign or

symbol. In much structuralist application in archaeology the material sign has meaning only by being similar or opposed to other material signs in some abstract code or structure, as words have meaning in language. Ricoeur, on the other hand, argues that human action is best discussed by reference to text rather than language. A text is a concrete product written to do something. It is the product of discourse - situated communication. The meanings of a text derive from the contextualisation of abstract principles in the practices of daily life. The meanings may become distanced from the situation of the 'writer' of the text and may depend very much on the context in which the text is 'read'. The meaning of material culture often depends on the context of use rather than solely on the context of production or on the 'author'. Even more than a written text, material culture meanings embody pragmatic and functional concerns. Text, rather than language, is thus an appropriate metaphor for the dual nature of material culture (as technological and functional object and as sign)" (Hodder 1993a: 153-4).

This passage helps emphasis the similarities and differences that exist between the two theorists. Following Ricoeur, Hodder believes that structuralism offers an adequate, but far from exhaustive, method for analysing certain aspects of material cultures meaningfulness. We noted a few of the shortcomings he saw with it in the previous section, however, there are other problems which arise out of a criticism made by Pierre Bourdieu, namely that structuralism lacks a theory of practice (Bourdieu 1993: 24 *passim*). By separating *langue* from *parole* one distinguishes between a formal set of relationships and the practice of use, consequently it is difficult to conceptualise how actors can make any impact upon linguistic structures. Therefore, not only does

structuralism have difficulty in comprehending how change occurs, the very notion of change can not be addressed in the first place due to the stress placed on synchronic systems. Another difficulty, which Eagleton points out, is how does a structuralist “identify the various ‘signifying units’ of the text in the first place? How [does] he or she decide that a specific sign or set of signs constitute such a basic unit, without recourse to frames of cultural assumption which structuralism in its strictest forms wish[es] to ignore?” (Eagleton 1986: 122). Concomitantly, Hodder asks, how are we to recognise a valid interpretation of a structure if it is so disconnected from reality?

“Structures, because they are organising principles, are not observable as such ... they can only be reached by reflective abstraction. Thus, structures of particular kinds could be said to emerge because the analyst is looking for them, trying to fit the data into some expected and hypothetical structural pattern. But how can such hypotheses ever be falsified? For structuralism to be a worthwhile pursuit, it must be possible to disprove a weak hypothesis” (Hodder 1995: 106).

This being said, such complications are superseded by taking up Ricoeur’s approach, especially his concept of the text, although Hodder’s use of it is not straightforward. To begin with, as he states in the above quotation, a text ‘is written to do something’, by which I take him to mean that it is produced to have an effect on a specific audience towards which it is directed. However, as we have already noted this characteristic of the text is of little consequence to Ricoeur; due to the influence of distancing the text is severed from its original social circumstances together with its original

audience. Ricoeur limits his discussion of the impact of a text to the here and now. Hodder goes on to say that a text is 'a product of discourse - situated communication'. Both these statements would be true if he were discussing Ricoeur's ideas about speech, but they are not applicable to his notion of the text. For sure, texts are a form of discourse, but they are not in Ricoeur's eyes situated discourses. In fact they are the opposite, one of their chief qualities being their non-situatedness, they are decontextualised, again due to distanciation. What Hodder appears to be doing is conflating discourse-as-text with discourse-as-dialogue, the latter being the only one characterised by being directed to a particular audience and performed in a specific context, according to Ricoeur. Yet Hodder's act of conjunction, whether intentional or not, flags a real difficulty in Ricoeur's work, how plausible is the distinction between dialogue and text? For example, in recent years 'talking books' have become very popular, are they dialogue or text? What is the nature of a tape-recorded private conversation? A clear-cut separation of dialogue from text seems to be difficult to sustain, maybe the best option would be to perceive them situated on a continuum with their 'pure' forms at either end. This being the case we may argue that the majority of discourse involves varying degrees of the qualities attributed to both forms, a stance that Hodder appears to take.

Returning to the quotation above, Hodder pushes his own interpretation further by asserting that it is the context of production, the 'practices of daily life', that provide the sources of meaning found in a text. However, in a step back in Ricoeur's direction,

he goes on to elaborate that the situation within which the text is read or used can also play a significant role in the constitution of its meaning. Again this is an aspect of distanciation, yet distanciation does not result, as it does for Ricoeur, in a seemingly complete detachment of meaning from the context of a text's origins. At the same time Hodder also believes that within a text, and more so an artefact, are incorporated meanings that are 'pragmatic and functional', qualities which can impinge on the meanings an artefact can carry and thus provide fresh channels for its interpretation.

Conclusion

Hodder's theoretical position has shifted over the years and the majority of critiques aimed at his work refer mainly to that period when his emphasis on the 'material culture as text' analogy was at its height, a position which offered something of an easy target. These critiques can be divided into roughly three camps, those who agree with Hodder, those who disagree with him and those occupying a middle ground between the two. The first, exhibiting a favourable attitude towards his writings, is exemplified by Susan Pearce whose own work is explicitly Saussurian. She argues that Hodder's emphasis on the symbolic qualities of artefacts has been generally accepted by those studying material culture (Pearce 1994: 12). Her views on Hodder's more recent work may be somewhat different.

At the other extreme lies a group, best termed as post-structuralists, who view Hodder's ideas as basically misguided. A member of this group who has given some thought to Hodder's ideas is Whitney Davis who, following Derrida's deconstructivist approach "denies the autonomous, transcendent reality, stability and retrievability of logoi [words or meaning] lying beyond or behind material cultural forms" (Davis 1992: 335). As a consequence Hodder's work is viewed as suffering from a disabling form of logocentrism, material culture cannot be perceived as the representation of meanings immediately present to the artefact's maker because thought itself is a form of 'writing'. Therefore, both thought and material culture occupy similar ground, both can be seen as a material mediation either in the supposed privacy of the stream of consciousness or in the production of inscriptions or artefacts. For Davis meanings "are made, 'written', by the makers neither before nor after but only always in the on-going, temporally and spatially ramified structure of making, 'writing', as such" (ibid: 336). Consequently, archaeologists should resist the apparently futile task of uncovering the traces of intentionality believed to exist 'beneath' their physical expressions, they should concentrate purely on the expressions themselves, artefacts as such.

At the same time, Davis argues that many of our actions, and thus their consequences, are frequently meaningless to the extent that they are non-intentional, they lack an aboutness, (intentional here being used in its broad, technical sense as appertaining to mental directedness). When we study an action or object it is impossible to distinguish

which elements of it are due to intentional thought and which are not, i.e. which are due to habitual actions for instance. With respect specifically to Hodder, Davis views his work as an eventually failed attempt to incorporate these deconstructivist ideas. What Davis finds as particularly erroneous is the association of meaning with context, that context provides a structure within which meanings are established. For Davis contexts are ultimately extremely diffuse phenomena, an infinite number of them can exist at any one point in time and space resulting in the continuous displacement of meaning. There is never just one meaning to be revealed, because there is never just one context, there is always *différance*.

Such criticisms cannot be accepted wholesale for two related reasons. Firstly, Hodder himself believes, and did so though to a lesser degree in his middle period, that it is all too easy to formulate misguided notions of meaning by relying solely on the application of structuralist oppositions. Meanings always possess the potential for change; they are, to greatly varying degrees, open to negotiation. A single object can have a multiplicity of concurrent meanings within the same society because of the diverse nature of all societies, not to mention the diverse nature of the artefact itself (Hodder 1993b: 232). Secondly, however, and unlike Davis, Hodder does not push this line of argument to its extreme so that meanings appear to take on a totally evanescent quality; he does not evince that disquiet seen in post-structuralist works by Gosden which ensues from the possibility that meanings may be grounded in the concrete. Contexts can act as brakes on the free-play of signifiers, yet, concomitantly,

they do not constitute absolute parameters within which meanings are established authoritatively. Contexts themselves always possess a degree of openness, thus they are both limiting and limited in nature, influencing but not determining meaning.

To follow this middle road is not, despite appearances, an act of expediency, but one of necessity, for the adoption of either of the extremes results in a position where meaningfulness is denied. At one end of the scale, where contexts have at most an ephemeral existence, meanings float free, it becomes all but impossible to attach meanings to signifiers. At the other extremity, where contexts are perceived as rigid, closed and self-defining structures, a similar conclusion is reached. If meaning exists purely as the consequence of a context then a position is quickly reached where the problem of relativism looms large. We have already encountered this scenario in relation to the work of Saussure, *langue* being analogous to context in this instance, yet there are many other examples where aspects of knowledge are heavily reliant on their position within an enclosed system. The works of Thomas Kuhn, Peter Winch and Hans-Georg Gadamer all exhibit varying degrees of relativism due to what can be seen as an over-reliance on context - or paradigms, world-views, traditions, etc. - and, interestingly, these often have their basis in language. Together with the relativism that such closed systems tend to inspire there often come other associated difficulties, most notably an incommensurability between different structures and an unreflecting acceptance that they do not contain any conflictual elements which mutually conspire to annul the possibility of change from external or internal sources. These problems are

sometimes acknowledged by the proponents of such systems resulting in certain modifications; i.e. Winch's introduction of three 'limiting notions', birth, death and sexual relations.

The incorporation of one or more external factors within a system of meaning is, therefore, of some importance for the very validity of that system. Furthermore, no system or context is ever self-circumscribed, its parameters are always dependent to a degree on the interests, questions and prejudices of those interested in it. What these points conspire to show is that in the specific case of material culture, as in other areas, distinct elements apart from context need to be addressed and accommodated if an adequate level of understanding is desired. This is one of the most important issues raised by Hodder, (and, to be fair, one that is recognised by Davis as well), one which the former has come to place ever more emphasis on over the years. Artefacts can not just be viewed as ciphers, as merely expressions of meaning, they are 'beings in themselves', objects in their own right. They do not only refer to something outside themselves, they also refer to themselves. As Hodder puts it, "material culture both represents and is" (Hodder 1995: 205). An inordinate amount of work has been carried out concerning the nature of representation and we have spent a considerable amount of time discussing the ways in which artefacts can act as signifiers and the problems this notion involves. What has attracted little attention is in what way material culture is. This general question has been recognised by the third, 'middle' group of Hodder's critics who saw his then overtly structuralist approach as offering

only a partial view of material culture, one that lacked a real confrontation with the repercussions ensuing from the physicality of the artefact. After this oversight was acknowledged by Hodder attempts have been made to rectify it as we saw in his more recently devised third scheme where some tentative steps are taken to establish a theoretical model which can accommodate, not only material culture's 'culturality', but also its 'materiality'. A substantial proportion of the following chapter will, therefore, be concerned with an extensive elaboration of the brief comments made by Hodder with respect to this largely overlooked aspect of social life. That is, the implications that flow from the physical characteristics of the artefact, particularly those concerning the forms of knowledge involved when we interact, both physically and mentally, with the object. Of course, much of the previous study has, to varying degrees, touched upon this area, but what is now required is the provision of a coherent picture. Such a picture must, by implication, be distinct, but not divorced from, those associated with the elaboration of what is most usually thought of as the 'cultural domain', (i.e. those theoretical perspectives which place particular emphasis on the ideational aspects of social life), for our dealings with them can be of a radically different nature. We cannot see a belief, taste an idea, touch a value or smell a theory. Our physical involvement with artefacts has significant consequences for us, both materially and, in the non-pejorative sense of the word, ideologically.

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Agents and Artefacts

Introduction

Up to this point our discussion has drawn upon a number of diverse works in order to form the basis of a conceptualisation of the artefact. It is the objective of this chapter to bring together the diverse ideas so far encountered so that a more complete picture can emerge of how artefacts become meaningful to us. To this end a tripartite scheme will be proposed, three forms or dimensions of meaning shall be discussed as being relevant to our understanding of the artefact. However, it should be kept in mind throughout this chapter that what is being dealt with here is just one aspect , one side of our relations with artefacts. Consequently, the emphasis shall be placed on humans as the active participants in our dealings with artefacts, the latter will be treated as passive objects. Such a perspective is a distorted one and is only being used for ease of explanation; a more balanced view will be presented in the penultimate chapter.

A cursory distinction

In a similar vein to Hodder, I want to begin by arguing that our relations with artefacts are of a heterogeneous nature involving different aspects of consciousness and thus diverse forms of knowledge. In drawing up a typology of these aspects of consciousness we will start with a distinction found at the heart of Giddens' structuration theory between discursive and practical consciousness. From the outset it should be made clear that although this differentiation is in my view very helpful, ultimately it cannot account for the diverse character of our cognitive activity, especially towards artefacts.

According to Giddens there are, in fact, three levels on which human cognition occurs, the one we have not so far mentioned being the unconscious. Therefore, we are presented with a three dimensional view of personality which, as Giddens acknowledges, bears some resemblance to Freud's ideas. However, for the former the unconscious impinges on our actions only indirectly, it is not the powerful motivating force that the latter believed it to be. Rather, the unconscious is seen as a 'basic security system' whose role is to guard against anxiety-producing stimuli, that is it is perceived as a system of unconscious mechanisms promoting the maintenance of an individual's ontological security. Ontological security is first and foremost accomplished through our participation in routine activity, through the predictable, repetitive nature of our day-to-day social life. "Routine", writes Giddens, "is integral

both to the continuity of the personality of the agent, as he or she moves along the paths of daily activities, and to the institutions of society, which *are* such only through their continued reproduction” (Giddens 1991: 60). However, the actual performances of routine activities are not unconscious, but are due to the knowledge held within practical consciousness. The unconscious and practical consciousness share a degree of similarity in that both are not immediately open to elucidation by the individual, yet, while for the former this is permanently the case, for the latter there always exists the potential that such a outcome may occur. The incapacity of the unconscious to be brought within discursive consciousness is due to two factors: “first, since the earliest experiences of the infant, shaping the basic security system whereby anxiety is canalised or controlled, predate differentiated linguistic competence, they are likely to remain thereafter ‘outside the bounds’ of discursive consciousness. Second, the unconscious contains repressions which inhibit discursive formulation” (ibid: 49). The unconscious is, therefore, ‘unknowable’, a form of knowledge which “cannot be translated into discourse without the influence of some kind of distorting mechanism” (Giddens 1988: 63).

However, for Giddens, we are all extremely knowledgeable beings; we possess an extensive understanding of our involvement in the world and the social world in particular. In his well known phrase, “every social actor knows a great deal about the conditions of reproduction of the society of which he or she is a member” (Giddens 1990: 5). Furthermore, “all actors have some degree of *discursive penetration* of the

social systems to whose continuation they contribute” (ibid: 5). It is this portion of our knowledge, that which we can express verbally, which is designated discursive consciousness. Yet Giddens pays relatively little attention to this form of consciousness. As he explains;

“human agents or actors ... have, as an inherent aspect of what they do, the capacity to understand what they do while they do it. The reflexive capacities of the human actor are characteristically involved in a continuous manner with the flow of day-to-day conduct in the contexts of social activity. But reflexivity operates only partly on a discursive level. What agents know about what they do, and why they do it - their knowledgeability *as agents* - is largely carried in practical consciousness” (Giddens 1991: xxii-iii).

Unlike the distinction between the unconscious and both forms of consciousness there is no absolute schism between practical and discursive consciousness - this “division ... can be altered by many aspects of the agent’s socialisation and learning experience. Between discursive and practical consciousness there is no bar; there are only the differences between what can be said and what is characteristically simply done” (ibid: 7). For Giddens “the notion of practical consciousness is fundamental to structuration theory” because so much rests upon it (ibid: 6). In essence it “consists of all the things which actors know tacitly about how to ‘go on’ in the contexts of social life without being able to give them direct discursive expression” and, as such, it exhibits similarities with the Wittgensteinian formulation of knowing a rule (ibid: xxiii). This

division of consciousness is not unique, resembling one formulated by Alfred Schutz (and subsequently used by Berger and Luckmann) and, it could be argued, Max Weber's differentiation between the rational and irrational orientations towards social action. Giddens illustrates his own conceptualisation of practical consciousness by using the example of language:

“Many most subtle and dazzlingly intricate forms of knowledge are embedded in, and constitutive of, the actions we carry out. They are done knowledgeably, but without necessarily being available to the discursive awareness of the actor. To speak a language, an individual needs to know an enormously complicated range of rules, strategies and tactics involved in language use. However, if that individual were asked to give a discursive account of what it is that he or she knows in knowing these rules etc., he or she would normally find it very difficult indeed” (Giddens 1988: 63).

Now, although Giddens' central concerns relate to the interaction between co-present agents, the notion of practical consciousness can, I believe, be taken up to facilitate our understanding of the relations between people and artefacts. The vast majority of our dealings with artefacts involve the application of practical consciousness; however, Giddens' notion of this phenomenon in its present state is unable to deal with the complexities of such encounters. One difficulty in particular which needs to be addressed is the proposal, only touched upon by Hodder, that many aspects of our relations with artefacts are devoid of meaning in the conventional sense; that is, because of their very nature they are incapable of being expressed linguistically. In

other words, certain aspects of our knowledge can never be stated verbally, but this is not because they lie beyond consciousness in some kind of unconscious and thus inaccessible realm. If this is true an adequate concept of practical consciousness needs to be able to encompass both linguistic and non-linguistic elements, a position which is thus different from Giddens'.

The notion that practical consciousness incorporates knowledge which is non-linguistic in character needs substantiating. Ultimately what has to be proved, therefore, is that there can be any forms of knowledge that are intrinsically non-linguistic. A great deal has already been written on this subject so to prevent ourselves becoming embroiled in a protracted debate we shall limit ourselves to just one line of argument loosely based around a paper by Maurice Bloch (Bloch 1990). Bloch begins his contention that a large proportion of our knowledge is of a non-linguistic nature by looking at the qualities of concepts and classificatory concepts in particular. Basically speaking, concepts are seen as mental representations of classes (e.g. one's beliefs about the class of dogs or tables), "to have a concept of *X* is to know something about the properties of *X*'s instances. Hence, the knowledge contained in a concept describes properties" (Smith 1991: 21). The classical view perceives that the elements which constitute a concept are singly necessary and jointly sufficient for its definition. However, this proposal has been shown to be untenable, a major problem being the difficulty in actually specifying what the defining properties of many everyday concepts are, e.g. what is a defining aspect of the concept 'furniture'? The now more generally

accepted view is that concepts are established with reference to properties that are seen as 'typical' or 'representative' and a great many of these may not be necessary. e.g. the property 'has a back' for the concept furniture (ibid: 22). Bloch offers his own example;

“the concept of a house is not a list of essential features (roof, door, and so on) which have to be checked off before deciding whether or not the thing is a house. If that were so we would have no idea that a house which has lost its roof is still a house. It is rather that we consider something as 'a house' by comparing it to a loosely associated group of 'houselike' features, no one of which is essential, but which are linked by a general idea of what a typical house is” (Bloch 1990: 185).

Therefore, as Smith explains;

“instead of offering defining conditions, the properties of a ... concept are assumed to occur in some instances, not all, and to be perceptually salient. A collection of such properties is called a prototype, for it accurately describes only the 'best examples' of a concept. According to this prototype view, the content of a concept is its prototype; an object will be categorised as an instance of a concept if it is sufficiently similar to the prototype, similarity being determined in part by the number of properties that the object and prototype share” (Smith 1991: 25).

Now what appears to be the case is that prototypes are not ideal, abstract representations, but instead relate to actual physical instances so that an individual's representation of the concept bird relates to their best examples of this concept, e.g. the robin and the sparrow. This being so;

“the typicality of any other instance could then be determined by its similarity to the best examples, and categorisation would be a matter of ascertaining whether an item had some critical level of similarity to the best examples. Furthermore, an exemplar representation provides the most straightforward explanation of why we often think of concrete cases when dealing with concepts - a concept is simply a set of concrete cases” (ibid: 42).

It seems fair to suggest, therefore, that many classificatory concepts emerge as a consequence of our active involvement in the world, and, this being the case, this process may begin from the very moment of birth. Whenever the actual starting point is it appears safe to assume that it occurs some time before the acquisition of language so supporting the notion that there is no mandatory link between concepts and words (Brown 1973). Bloch extends this line of argument by introducing the work of Melissa Bowerman (1977) who demonstrates that once language has been acquired there begins “a continual back and forth movement between aspects of classification which are introduced through language and mental concepts, as the child learns to express these concepts through words. This dialectical movement ... suggests a much more general process ... by which originally non-linguistic knowledge is partly transformed

as it becomes linguistic.” (Bloch 1990: 186). Bloch at this stage outlines three provisional conclusions:

“(1) that much of knowledge is fundamentally non-linguistic; (2) that concepts involve implicit networks of meanings which are formed through the experience of, and practice in, the external world; and (3) that, under certain circumstances, this non-linguistic knowledge can be rendered into language and thus take the form of explicit discourse, but changing its character in the process” (ibid: 186).

If we accept these premises at face value it may be possible to incorporate them within a somewhat modified system of knowledge based upon that of Giddens. Before discussing the feasibility of such a proposition another aspect of Bloch’s work needs to be addressed, one concerned with that part of non-linguistic knowledge involved in the learning of practical, everyday tasks.

Many of our day-to-day skills are acquired without the use of explicit verbal instructions, instead they are learned very gradually through imitation and tentative participation. This truism and its implications have been relatively overlooked in cultural studies of Western, industrialised societies, probably due to the perceived dominance of formalised educational systems with their emphasis on linguistic, Socratic teaching techniques. However, this is not so with respect to anthropological studies where the non-verbal transmission of skills has often been noted, generally, for decades and, more specifically, in recent studies of textile and garment manufacture in

Ghana and Liberia. The importance of such investigations, for Bloch, lies in “the fact that the transmission of knowledge in West African weaving and tailoring [being] largely non-linguistic may have less to do with the culture of education in these places than with a general feature of the kind of knowledge that underlies the performance of complex practical tasks which requires that it be non-linguistic” (ibid: 187). To support this claim a different tack is taken. Drawing upon research outlined in Dreyfus and Dreyfus (1986) Bloch describes situations where the process of skill acquisition starts with verbal instruction, but then this knowledge is transformed into a fundamentally non-linguistic form as the pupil becomes ever more proficient. An often used example is that of learning how to drive. Here we can ‘know’ how to drive, (what the compression of the various pedals achieves, in what combinations this should be done, and what associations such actions should have in relation to the shifting of the gear-stick), through verbal instruction. However, this knowledge has to be converted into non-linguistic, integrated procedures before the task can be effected rapidly, efficiently, automatically and, we could say, properly. Usually, it is only when performances are carried out without thinking in words that people recognise themselves as competent drivers.

What appears to happen in the process of learning is that individuals acquire not only specific formal rules relevant to the situation which can be readily expressed in words, but also what are termed particular ‘cognitive mechanisms’ of a non-linguistic nature. These mental apparatuses, ‘chunks’ of knowledge, are established through practical

experience and enable us to cope with information relating to a family of related tasks quickly and efficiently. Concomitantly, by possessing knowledge in such units, it has been argued, the brain's neurological potential is greatly enlarged - if all knowledge was held in a language-like form our overall capacity to deal with information would be severely limited.

What Bloch argues for, then, is that in our activities in the world our knowledge of it has a binary quality. On the one hand we have linguistic knowledge organised in a sentential, linear fashion which, because of its very character, can be expressed directly in words. On the other hand there is non-linguistic knowledge, associated more with everyday practical activities and cognition, which is packaged into relatively distinct networks appropriate to operations in specific familiar domains. Bloch sees a 'fluid transformative boundary' between the two, we can unpack cognitive mechanisms into linear, sentential sequences which can then be put into words. However, "the process of putting knowledge into words must require such a transformation in the nature of knowledge that the words will then have only a distinct relationship to the knowledge referred to" (Bloch 1990: 192). This has important methodological implications;

"if the anthropologist is often attempting to give an account of chunked and non-sentential knowledge in a linguistic medium (writing), and she has no alternative, she must be aware that in doing so she is not reproducing the organisation of the knowledge of the people she studies but is transmuting it into an entirely different logical form. To effect such a transmutation is not impossible - after all we can describe

things which are not linguistic. But in the attempt to evoke such knowledge we should avoid stylistic devices which turn attempts at description into quasi-theory, as was the case with structuralism Perhaps we should make much more use of description of the ways things look, sound, feel, smell, taste and so on - drawing on the realm of bodily experience - simply for heuristic purposes, to remind readers that most of our material is taken from the world of non-explicit expert practice and does not only come from linear, linguistic thought" (ibid: 193).

Bloch's distinction between linguistic and non-linguistic knowledge can be seen to ally fairly well with Giddens' notions of discursive and practical consciousness; both stress the centrality of language to the first side of this dichotomy and the importance of practical experience to the other side. However, there are significant differences. One of the most serious of these is that although both see the border between their two forms of knowledge as open the ability to pass from the practical to the discursive level is much more problematic for Bloch than it is for Giddens. This variance between the two theorists rests on Bloch's assertion that the distinction between discursive and practical knowledge emerges out of a real difference between forms of consciousness, i.e. linguistic and non-linguistic. For Giddens, however, both types of consciousness are ultimately linguistic in character, and this quality is even carried over into what he describes as the unconscious; "it is reasonable to argue that one can at least make headway in understanding what the unconscious is by following the line of thought that the unconscious 'is structured like a language'" (Giddens 1988: 63).

The fact that all three of Giddens' levels of consciousness should possess linguistic characteristics should come as no real surprise as there exists an implicit belief within his work that social life as a whole and language share many qualities. As he states;

“speech and language provide us with a series of useful clues as to how to conceptualise processes of social production and reproduction - not because society is like a language, but on the contrary because language as a practical activity is so central to social life that in *some* basic respects it can be treated as exemplifying social processes in general” (Giddens 1986: 127).

That being said we must also remember that even though the unconscious is possibly structured like a language Giddens views it simultaneously as non-linguistic because it develops, in the guise of the ontological security system, before language is acquired (Giddens 1991: 57). Such proposals do not lie happily together, we are left being directed towards a situation where the suggestion that we possess innate dispositions which order all levels of consciousness in a language like manner seems one of the few ways of explaining Giddens' standpoint. However, this is precisely the argument that we have just encountered Bloch disputing by asserting that, not only is a large amount of our knowledge formulated outside natural language, but that it is in no way language like. It cannot be so if we are to deal adequately with the vast amount of information required to carry on our day-to-day activities. Giddens' own perspective implies a model of thought only really applicable to sentential, logical knowledge, to just his own discursive level of consciousness, to what Dreyfus and Dreyfus describe

as the 'Hamlet model' of decision making where the actor puts his thoughts into words and weighs up and analyses the alternatives in a self-conscious, logical fashion (Dreyfus & Dreyfus 1986: 28).

However, by pointing out the shortcomings of Giddens' work in this area we must not infer that Bloch's ideas provide all the solutions. Ultimately, Bloch repeats the same crime as Giddens by proposing a simple dualistic model of conscious knowledge, a position we criticised the latter for promoting earlier on in this chapter. Such a view brings with it certain difficulties. Whereas Giddens can be criticised for perceiving discursive and practical consciousness as too similar in character, Bloch proposes a split between linguistic and non-linguistic knowledge which is too dramatic for, despite seeing their border as permeable, the transition from one to the other requires, in all cases, a dramatic transformation in the nature of the information involved. Also, Bloch's scheme implies that the non-linguistic realm is of a singular quality, whereas I would want to argue that it is, in fact, quite diverse. Consequently, while some knowledge will indeed be distorted by being transformed into language the degrees of transformation are not always of the same degree. Concomitantly, the possibility must be left open that some forms of practical consciousness, if this is an appropriate term, may never be able to be referred to linguistically.

Artefacts and Practical Consciousness

To substantiate the claim that practical knowledge is of a much more complex nature than either Giddens and Bloch believe it may be worthwhile to approach this issue from a different angle. It has probably become apparent during the preceding discussion that the discursive/practical and linguistic/non-linguistic dichotomies bear certain similarities to a dualism we encountered earlier on in this study, Langer's distinction between discursive and presentational forms. Langer, you will recall, believed that our understanding of the world is achieved in two ways, via language, which is linear and sequential in character, and directly through our senses where information is received synchronically. Now, in many respects, Langer's ideas can be seen to mirror those of Bloch much more than they do Giddens', particularly as both place great emphasis on a separation between the linguistic and non-linguistic. At the same time both see the transition from the latter to the former as entailing a degree of transmutation in the knowledge involved. For Bloch this is due to the unpacking of chunks of knowledge and the distinct items being laid out in successive order which can then be expressed linguistically. For Langer the alterations occur when simultaneous experiences are separated and structured in a linear manner for their expression in language. Here we come across a fundamental difference between these two theorists, because whereas Bloch's scheme rests upon two different modes of conceptual thought, Langer's originates from a distinction between conceptual thought and the inherent ordering capacities of our sense organs. According to Langer;

“our merest sense-experience is a process of *formulation*. The world that actually meets our senses is not a world of ‘things’, about which we are invited to discover facts as soon as we have codified the necessary logical language to do so; the world of pure sensation is so complex, so fluid and full, that sheer sensitivity to stimuli would only encounter what William James has called (in characteristic phrase) ‘a blooming, buzzing confusion’. Out of this bedlam our sense-organs must select certain predominant forms, if they are to make report of *things* and not of mere dissolving *sensa*. The eye and the ear have their logic - their ‘categories of understanding’, if you like the Kantian idiom An object is not a datum, but a form construed by the sensitive and intelligent organ, a form which is at once an experienced individual thing and a symbol for the concept of it, for *this sort of thing*” (Langer 1967: 89).

One peculiar outcome of this stance, Langer believes, is that each sense has a family of art specific to it, the arts are discrete entities resting on empirical foundations and no hybrid works are possible, (but what of opera, illustrated books, etc.?). However, what is of greater interest to us here is her attitude towards the knowledge formulated by our sense organs. Langer goes on to say that;

“a tendency to organise the sensory field into groups and patterns of sense-data, to perceive forms rather than a flux of light-impressions, seems to be inherent in our receptor apparatus just as in the higher nervous centres with which we do arithmetic and logic. But this unconscious appreciation of forms is the primitive root of all abstraction, which in turn is the keystone of rationality; so it appears that the conditions of rationality lie deep in our pure animal experience

- in our power of perceiving, in the elementary functions of our eyes and ears and fingers. Mental life begins with our mere physiological constitution” (ibid: 89).

Now, while I would accept the last statement with certain important reservations, for the moment I want to concentrate on Langer’s thoughts over sense data knowledge. From the preceding quotations we are given the impression that this form of knowledge is of a more basic nature than its discursive counterpart; elsewhere she states that “the abstractions made by the ear and the eye - the forms of direct perception - are our most primitive instruments of intelligence” (ibid: 92). However, this primitiveness should not be equated with simplicity. With specific reference to the visual forms the relations between different aspects of the objects of vision are more complex than those existing between words in a sentence, for in the former case the elements are experienced simultaneously while in the latter case they occur sequentially. This being so the complexity of an idea expressed in discourse is limited by what the mind can retain from the beginning of an apperceptive act to its end. Hence;

“an idea that contains too many minute yet closely related parts, too many relations within relations, cannot be ‘projected’ into discursive form; it is too subtle for speech. A language-bound theory of mind, therefore, rules it out of the domain of understanding and the sphere of knowledge. But the symbolism furnished by our purely sensory appreciation of forms is a *non-discursive symbolism*, peculiarly well suited to the expression of ideas that defy linguistic ‘projection’. Its

primary function, that of conceptualising the flux of sensations, and giving us concrete *things* in place of kaleidoscopic colours and noises, is itself an office that no language-born thought can replace. The understanding of space which we owe to sight and touch could never be developed, in all its detail and definiteness, by a discursive knowledge of geometry” (ibid: 93).

According to Langer, therefore, non-discursive or presentational knowledge is simultaneously both potentially more primal and more complex than discursive knowledge. A similar point concerning the elaborate character of visual forms has been noticed by Nelson Goodman. He asserts that “non-linguistic systems differ from languages, depiction from description, the representational from the verbal, painting from poems, primarily through lack of differentiation - indeed through density (and consequent total absence of articulation) - of the symbol system” (Goodman 1969: 226). Goodman’s notion of density and differentiation are best illustrated by his own example of the contrast between a graduated and an ungraduated thermometer. As Mitchell helpfully explains;

“with a graduated thermometer every position of the mercury is given a deterministic reading: either the mercury has reached a certain point on the scale or it is read as being closest to that point. A position between any two points on the scale does not count as a character in the system: we round off to the closest determinate reading. In an ungraduated thermometer, on the other hand, no unique, determinate reading is possible at *any* point on the thermometer: everything is relational and approximate, and every point on the ungraduated scale (an infinite

number, obviously), counts as a character in the system. Every tiny difference in the level of the mercury counts as a different indication of the temperature, but none of these differences can be assigned a unique, deterministic reading. There is no possibility of finite differentiation or the ‘articulation’ of a single reading” (Mitchell 1986: 67).

Now, for Goodman, a visual image or, more specifically, a painting is ‘read’ in a similar way to an ungraduated thermometer.

“Every mark”, Mitchell continues, “every modification, every curve or swelling of a line, every modification of texture or colour is loaded with semantic potential The image is syntactically and semantically dense in that no mark may be isolated as a unique, distinctive character (like a letter of an alphabet), nor can it be assigned a unique reference or ‘compliant’. Its meaning depends rather on its relations with all the other marks in a dense, continuous field. A particular spot of paint might be read as the highlight on Mona Lisa’s nose, but the spot achieves its significance in the specific system of pictorial relations to which it belongs, not as a uniquely differentiated character that might be transferred to some other canvas” (ibid: 67).

Whereas Langer’s system has its basis in Kantian thought, Goodman’s is markedly conventionalist in character, yet both stress a similar point. Namely, that in the case of the visual arts the perception of distinct symbolic elements, (i.e. equivalent to letters or words in a language), is all but impossible. Consequently, meaning cannot be seen as being transferred by paintings in the same way as it is by language - there is no linear

sequence of characters to be followed from the beginning of a sentence to its predetermined end, there is just a vast array of indistinct patches of pigment that are taken in and understood more or less simultaneously.

This set of circumstances is, of course, of a far greater complexity if we extend it beyond the parameters of the two dimensional graphic arts to artefacts in general, for now not only do we encounter an infinite amount of visual stimuli, but also a superabundance of sensations associated with touch, smell, sound and taste. These also exhibit a lack of natural compartmentalisation, no discrete elements are immediately apparent. According to Langer and Goodman their homogenous nature means that presentational forms are denied the ability to denote, a single splash of paint, for example, has no one-to-one relationship with a concept. Yet, far from diminishing their importance, Langer argues that they possess the potential to connote, to explicate “‘unspeakable’ things”; feelings (Langer 1967: 101). Music in particular is viewed as articulating and communicating emotional states at a level which language cannot attain.

Langer’s ideas help us to appreciate some of the complexities involved when we move beyond the discursive realm, highlighting a few of the problems encountered in trying to understand it. However, her work suffers from a marked tendency to exaggerate the differences between the information associated with discursive forms and that allied to presentational forms, a distinction even more extreme than that proposed by Bloch

between linguistic and non-linguistic knowledge. Not surprisingly we come across a similar, though more considerable, difficulty as was found with Bloch's work, concerning the movement from one domain to the other. However, whereas there always exists the possibility of such a transference between his forms of knowledge, this is apparently denied by Langer as presentational knowledge is based on the physiology of our sensory organs and is, therefore, 'unconscious'. There is thus a clear split between discursive forms which gives rise to knowledge of which we are consciously aware and can be expressed in words and presentational forms which result in an unconscious type of 'emotional knowledge', "which the mind reads in a flash, and preserves in a disposition or an attitude" (ibid: 98).

However, is this division as great as Langer suggests? Surely the portrayal of emotional states in words has been one of the main aims of a great many poems and novels, one that is often achieved. To a far lesser extent, but no less importantly, writers have also discussed the 'dispositions and attitudes' associated with presentational forms, with artefacts in particular. We have already noted a few who have taken a more analytical approach to this topic, Marx and Arendt whom we shall return to later, but there also exist more literary examples. Novelists as diverse as Balzac, Bennett, Perec and Baker all accentuate the relations artefacts have with people via attitudes and dispositions, (see especially Balzac 1968 & 1988, Bennett 1989 & 1995, Perec 1991 and Baker 1990). Therefore, while I am not saying that

much of the knowledge gained from presentational objects can be expressed precisely in language, I would argue that it is not as difficult as Langer believes it to be.

The difficulties we find with the work of Langer and Bloch appear to emerge partly as a consequence of preoccupation with overly strict typologies, with strong dualistic systems. Such problems can be ameliorated if we amalgamate some of Langer's ideas with those of Bloch. Let us assume that when we come into contact with an artefact a major part of our knowledge of it is constructed out of past and present experiences of the same or similar objects. Thus, when I drink from the glass now in front of me I recognise it visually, I know how heavy it is and so how much force is required to lift it, I know how it feels to my hand and lips, etc. Such knowledge is implicated in my actions towards it, as a package of information all these elements of knowledge are utilised simultaneously. I therefore possess chunks of knowledge concerned with, usually, types of artefacts which have been gleaned from my own personal experiences with such items, information from my own senses which enables me to interact with these objects in a cognisant fashion. However, the very act of my describing this situation, of putting it down in words, suggests that the distinction between this practical knowledge and discursive knowledge is not as dramatic as Langer proffers. This is not to argue for a position similar to Giddens', the ability to describe practical knowledge in words does not mean that it is linguistic in nature. For sure, artefacts, such as a watch, can be dismantled into their component parts, but this is not the same as breaking a sentence down into individual words as all we are left with is a greater

amount of smaller artefacts. The reason we do not perceive artefacts in a language like manner in most of our day-to-day activity is due, as Bloch argues, to the fact that it would take an inordinate amount of time to do so and an excessive amount of neurological potential would have to be utilised.

A final point to be made concerning both Bloch's and Langer's typologies is that by adhering to systems in which there exist only two elements the possibilities of refinement and elaboration are severely restricted. The way in which knowledge is acquired and processed can only be conceptualised within one sphere or the other, a position which entails two notable consequences. Firstly, the ability of one realm to affect the other and vice versa becomes a matter of some difficulty as we have already seen. Secondly, by denying either the possible existence of other forms of knowledge or variations within a form the two that are proposed must encompass a diversity of phenomena. This is especially the case with respect to non-linguistic or presentational knowledge; in the following section an argument will be forwarded in support of a division of this area.

Embodied Knowledge

The proposal that there exists a third form of knowledge, apart from the discursive and practical forms, takes its cue from an idea expressed by Hodder. In *Theory and*

Practice in Archaeology Hodder refers to the notion of motor knowledge, but unfortunately he provides us with very little to go on as to its nature. The scheme within which this form of knowledge is embedded takes its inspiration from an article by Jacques Pelegrin. Pelegrin, at first sight, appears to be yet another theorist who proposes a binary typology of knowledge. His notions of *connaissances* and *savoir-faires* reflect a distinction made by a number of psychologists (e.g. Winograd 1975, Anderson 1976 and Squire 1986) between two forms of memory processes or systems, the declarative and the procedural. This system shares many features with those already discussed above, but it also exhibits important differences. According to Squire;

“declarative memory is explicit and accessible to conscious awareness, and it includes the facts, episodes, lists, and routes of everyday life. It can be declared, that is brought to mind verbally as a proposition or nonverbally as an image. It includes both episodic memory (specific time-and-place events) as well as semantic memory (facts and general information gathered in the course of specific experiences). ... In contrast, procedural knowledge is implicit, and it is accessible only through performance, by engaging in the skills and operations in which the knowledge is embedded” (Squire 1986: 1614).

Thus we are presented with one more dichotomous system, but with the dividing line redrawn. Interestingly both linguistic and non-linguistic elements are placed within the same category, the declarative, the common feature being that knowledge can be ‘brought to mind’, not that it can be expressed verbally. Procedural memory, on the

other hand, is explicitly related to the body, tied to the performance of physical actions. However, although Pelegrin believes that Squire's declarative/procedural memory distinction corresponds to his own *connaissances/savoir-faire* distinction their views do differ over the character of the second form.

No such discrepancy appears to exist with respect to the first form so, for Pelegrin, within *connaissances* "can be classed the mental representations of forms and materials (concepts), and a register of action modalities (brief gesture sequences associated to their practical result). Referring to the memorisations and mental representations of objects and of facts, this knowledge ensues from a memory that is explicit and declarative in nature" (Pelegrin 1990:118). Yet, unlike Squire, such representations are implicated in the second category, in *savoir-faires*. This he terms ideational know-how and corresponds to;

"operations - spatial and sequential transformations, comparisons - undertaken on the mental representations. The artisan imagines (that is, constructs new mental representations of) the virtual state of the object according to the envisaged actions, and considers their respective advantages and risks. These mental operations are not only spatial (upon forms), but they are also organised chronologically and sequentially It is evident that only practical experience can enable one to gradually refine estimations and to optimise reasonings which are essentially subconscious" (ibid: 118).

So there seem to be two distinguishing characteristics of ideational know-how that ensure its separation from *connaissances*. Firstly, it appears to involve an active process; (passive?) representations are acted upon by ideational know-how. Secondly, this process does not occur consciously, in the realm of *connaissances*, but rather takes place in the subconscious, (although what the term subconscious actually refers to is not made clear). One problem that immediately becomes apparent is how a process occurs in which representations, which are explicit and conscious, can be manipulated and refined through an action which is subconscious.

Another form of *savoir-faires*, motor know-how, is described by Pelegrin in relation to the production of flint tools:

It “corresponds to intuitive operations on the assessed adequacy of the knapping parameters invoked in the current operation. The mass and quality of the striking tool, as well as the mass and morphological characteristics of the object to be knapped, are appreciated through vision and tactile sensibility. Following that, the orientation and handling of the object by the non-dominant hand, and the strength and trajectory of the gesture carried out by the dominant hand are ‘calculated’. It is crucial to note here that these gestures are rapid, and their course cannot be appropriately controlled by vision. The eye does control the position and orientation of the object prior to percussion, but the character of the knapping gesture itself has also to be ‘programmed’ prior to the movement. This means that the adequacy and success of the muscular execution of the knapping gesture necessarily relies on prior practical experience” (ibid: 118).

A more contemporary everyday illustration is provided by Hodder who explains that;

“this type of knowledge involves, for example, the sense of balance and other skills which are used in riding a bicycle or the adjustments of body posture needed in order to keep upright while windsurfing. We can be told how to do all these things, but usually the verbal knowledge is insufficient for us to be able to do them. We normally need practical experience and training” (Hodder 1995: 206).

Unlike ideational know-how, motor know-how can be seen to fit quite neatly into Squire’s notion of procedural memory, being by definition tied to the body. This is the final dimension of knowledge which is relevant to the artefact, but although motor know-how is of great significance to our understanding of material culture very few people have attempted to try and come to some kind of understanding of it. For example, the above quotation from Pelegrin amounts to the sum of his descriptions of this phenomenon. To an extent this is understandable for it can be seen in some ways as lying furthest away from discursive knowledge, its very ‘non-linguisticity’ ensures that descriptions of it are not to be made easily. However, that being said there are a few theorists that we can turn to in order to gain some insights, some indications as to its nature. One such person is the psychologist Jean Piaget who believes that important aspects of knowledge are acquired through bodily activity.

As is well known Piaget’s research is concerned with the explanation of cognitive development, concentrating on the dramatic changes that occur in this field during

childhood. His theories have attracted a great deal of attention since their inception and a number of limitations have been recognised; most notably concerning his research methodology and a general underestimation of the child's cognitive abilities. Despite these reservations there does appear to be a widespread recognition that Piaget's ideas provide the most fruitful approach to this subject. His perspective is adroitly summed up by Michael Eysenck:

“At the most general level, Piaget argued that the development of intelligence is the highest form of adaptation of an individual to his or her environment. Adaptation involves an interaction between the individual's knowledge and the external environment, and two basic processes can be identified in their interaction: assimilation and accommodation. Assimilation occurs when there is some kind of cognitive structuring of an external object or event in accordance with the individual's pre-existing cognitive organisation. In contrast, accommodation occurs when this cognitive organisation is modified by the need to deal accurately with the requirements of environmental events. In other words, adaptation involves both an assimilation of the external environment *to* cognitive structure and an accommodation of cognitive structure to the external environment” (Eysenck 1988: 232).

According to Piaget cognitive development progresses through four major stages, an epigenetic process in that each stage, rather than being substituted by the preceding one, incorporates the one preceding it. The first stage, the one most relevant to this study, is termed the sensori-motor stage which begins at birth and ends at around the age of two. Much of this time is taken up developing perceptual (sensori-motor)

categories of objects, i.e. non-conceptual categories that allow discrimination between, for example, male and female faces on an essentially perceptual basis, but do not entail conceptual knowledge about people Piaget perceived such categories, according to Jean Mandler, as consisting of;

“sets of perceptual-motor schema that enable infants to recognise a variety of objects (and events) and to act appropriately in their presence. He saw no evidence that infants, during this period, have any conceptual representations that would enable thought *about* objects. In Piaget’s analysis, concepts develop when sensori-motor schemas become ‘interiorized’, ‘speeded up’, and freed from ongoing perception and action. This transformation ... depends heavily on learning about objects through physical interactions with them” (Mandler 1992: 588).

Consequently, the child is involved in a dynamic relationship with the external world, a relationship which is essentially physical in character, the environment being confronted directly. The knowledge that emerges from this process can be seen as quintessentially intelligence in action, concerned with actual objects and events. Reality is therefore understood, to start with at least, primarily through bodily activity rather than through mental representations or the manipulation of symbols. It is the gradual attainment of basic concepts which is the great achievement of the sensori-motor stage, the most important of which, to Piaget’s mind, is the concept of object permanence, the permanence of form and substance of immediate objects. It is through sensori-motor intelligence that objects are eventually regarded as possessing an

independent existence from the child and, concomitantly, a nascent idea of the self begins to develop.

As these notions originate at such an early age, before the acquisition of language, it does not seem too farfetched to propose that language is founded upon them. As Eysenck states, “thinking certainly begins at an earlier developmental stage than language in the human child, and it seems reasonable to follow Piaget in arguing that language in the young child builds on the cognitive abilities which have developed during the pre-language sensori-motor period” (ibid: 210). Brown holds a similar view; “where should the meanings of the first linguistic constructions come from if not from the sensori-motor intelligence which directly precedes them?” (Brown 1973: 199).

Piaget’s ontogenetic theory, therefore, offers us some interesting insights into the part played by sensori-motor knowledge in the young child, helping to establish the concept of permanence and so space and time and, concomitantly, establishing the foundations for the emergence of language. Such assertions, unsurprisingly, have not gone uncontested. Fundamental difficulties arise in carrying out research on pre-linguistic children, both in the design of the experiments and in the interpretation of results. Whatever these problems entail we are still left with the question, how does Piaget’s work enable us to understand the role of sensori-motor intelligence in the adult? Piaget sees striking qualitative changes in thinking during the years of childhood rather than

quantitative changes, the modes of thinking differ dramatically from birth to adolescence. It appears, therefore, that sensori-motor knowledge is subsumed within the latter stages of cognitive development so that the impression is given that its role, though vital at the outset, becomes less so as the child's mental abilities evolve.

The implied relegation of the importance of sensori-motor knowledge seems symptomatic of a more general dismissive attitude towards its significance. However, one exception to this rule is found in the work of Maurice Merleau-Ponty, whose work shares some similarities to Piaget's. Merleau-Ponty's writings are renowned for their vagueness and complexity and in order to abstract just those elements that are of relevance to this study I shall rely heavily on one article, *Merleau-Ponty, the Elusive Body and Carnal Sociology* by Nick Crossley.

A major concern of Merleau-Ponty is perception;

“perception”, in Crossley's words, “is an embodied experience. It is sensational. But it cannot be understood as a caused effect of a world of physical objects upon the body (understood itself as a physical object). Perception does not consist in one object having effects upon another for Merleau-Ponty. It consists in meaning; that is, in the fact that something is seen or heard etc. Physiological/causal approaches do not and cannot account for this” (Crossley 1995: 45).

Merleau-Ponty establishes his distinctive views on perception via three basic arguments. Firstly, in opposition to a Cartesian perspective, perception as occurring in-the-world instead of in the mind:

“The visual perception of an object, such as a table, for example, forms between the table and the body of the perceiver There are not two tables, one in the world and one in the mind but rather one table which is seen. [Therefore,] it involves one order, perception or the visible, which may be subdivided (by means of theoretical reflection) into two derived, interdependent and relational aspects (i.e. perceiver and perceived)” (ibid: 46).

Secondly, Merleau-Ponty denies that the mind and body are distinct substances. Perception, being both sensational and meaningful, is essentially a meaningful configuration of sensations and these sensations belong to the body as a sentient being. Consequently, the body can be said to have two sides, sentient and sensible, or what Merleau-Ponty refers to as the phenomenal body (*le corps phenomenal*) and the objective body (*le corps objectif*). Therefore;

“it sees and can be seen, hears and can be heard, touches and can be touched. These sides are not separate from each other ... they are reversible aspects of one and the same being. The human body is a visible-seer, a tangible-toucher, an audible-listener, etc. Moreover, the body’s visible-tangible presence is central to its perception for Merleau-Ponty ..., one never perceives from nowhere ... one always perceives from somewhere (e.g. above, to the side, at a distance, etc.) and it is

one's visible, tangible presence which provides this somewhere. The perceptual field, in this respect, is constituted through the articulation of body and world" (ibid: 46-7).

This leads us on to the third point, perception is constituted through our active involvement in the world, it is based in behaviour; "that is, in looking, listening and touching, etc. as acquired, cultural, habit-based forms of conduct. The perceiving body constitutes itself, as such, he argues, by implementing acquired perceptual schemes. It does not passively receive messages from the world but actively interrogates the world, in terms of the cultural schemes which it has acquired" (ibid: 47). For Merleau-Ponty, then, perception's primary function is not contemplative, but practical involvement:

"Perception is instrumental in relation to our on-going projects and is not usually a project in itself. This is reflected, moreover, in our experience of perception: e.g. a footballer surveying the pitch will not 'see' grass and bodies but rather 'openings' and 'opportunities'. Her visual field will be structured through her practical involvements. [Furthermore,] as such, perception is integrated with and inseparable from our other bodily modes of practical engagement. Action and perception intertwine and mutually inform each other in the context of a single project: e.g. the footballer moved into action by the opening that she sees (without any reflective process taking place)" (ibid: 48).

In fact, Merleau-Ponty believes that our principle relation to the world is of this active and unreflective kind. Our actions are, for the most part, carried out 'unthinkingly' as

is the co-ordination of bodily movements which constitute such actions. This power of bodily co-ordination, proprioception, is the co-ordination of the body-in-the-world:

“The body possesses a synthetic and co-ordinating power in relation to itself, he argues, by means of its action in the world. It ‘knows’ itself by way of its active relation to its world. Moreover, in this sense, the body-subject [i.e. the phenomenal body] equally ‘knows’ the world, in a practical way, irrespective of reflection or intellection. My fingers ‘know’ the space and layout of the word-processor keyboard, ‘I can’ type, for example, irrespective of the fact that I am unable to give a linguistic and reflective account of this layout (without looking)” (ibid: 54).

The boundaries of the phenomenal body can also be viewed as extending beyond the surface of the objective body through our use of objects. Again driving can be used as a helpful illustration:

“When we drive a car ... we not only ‘know’ its internal functional space, we tacitly incorporate its potential for motility, its size and acceleration potential, into our judgements. Parking, pulling out, overtaking, etc., all entail that we think not about the car but ‘from the point of view of’ the car. Moreover, no aspect of this thought is reflective, reflexive or discursive (at least it need not be). It is practical, embodied know-how and mastery” (ibid: 54).

Merleau-Ponty believes that this 'existential understanding' constitutes a world of meaningful objects which is prior to and independent of reflective and reflexive thought, one that only becomes 'conscious' when something unexpected occurs, e.g. when the clutch cable snaps. The origins of this type of understanding are to be found in a cultural stock and is acquired, not by intellection, not by appropriating intellectual principles, but through doing, through repetition. It is through this process that the body secures a relatively flexible power of action and reaction, a modality of understanding. To understand, in this sense, is to act competently, the body thus acts meaningfully, with skill and purpose.

To Crossley's mind this perspective entails two significant corollaries. Firstly;

"that a sociological analysis of regimes of embodied action or of body repertoires, should be understood as a sociology of meaning and understanding. To analyse the way in which a body moves and the techniques which it draws upon is to analyse the way in which its environment is made both functional and meaningful for it. Practical action should be understood as a way of taking up a meaningful position in the world. Secondly, and following on from this, Merleau-Ponty's position provides a corrective to the strong bias towards linguistic constitution in contemporary sociological understandings of meaning. What Merleau-Ponty effectively argues ... is that the world of shared meanings is effectively constituted, not only by speech acts, but by other forms of bodily action and comportment. My desk and chair, to use the usual example, not only exist as meaningful phenomena in the social world by virtue of their being named. Indeed they are seldom

referred to by their name or anything like it. They exist as meaningful aspects of the social world by virtue of the fact that I sit at them and write, that *I (qua practical body-subject) use them in a meaningful way*. It may only be when I *misuse* them that I am reminded, linguistically, that they are furniture and that I should be *using them* in a different way” (ibid: 55-6).

To an extent these appeals are answered in the work of Pierre Bourdieu who proposes that “Merleau-Ponty, and also Heidegger, opened the way for a non-intellectualist, non-mechanistic analysis of the relations between agent and world” (Bourdieu 1990a: 10). The danger with intellectualism is that it “is inscribed in the fact of introducing into the object the intellectual relation to the object, of substituting the observer’s relation to practice for the practical relation to practice” (Bourdieu 1990b: 34). For Bourdieu much of our understanding of the world is of a kind which is entirely unarticulated, a mode of understanding which does not reside in thought or representations; rather it is embodied and finds expression in practice, a notion he attempts to encapsulate in the term *habitus*. This he defines as “a system of durable, transposable dispositions which function as the generative basis of structured, objectively unified practices” (Bourdieu 1979: vii). *Habitus* includes, according to Charles Taylor;

“dispositions to bodily comportment, say, to hold oneself or to gesture in a certain way. A bodily disposition is a *habitus* when it encodes a certain cultural understanding. The *habitus* in this sense always has an expressive dimension. It gives expression to certain meanings that

things and people have for us, and it is precisely by giving such expression that it makes these meanings exist for us” (Taylor 1993: 58).

More accurately, embodied habitus is referred to specifically by Bourdieu as *hexis*. “Bodily *hexis* is political mythology realised, *em-bodied*, turned into a permanent disposition, a durable manner of standing, speaking, and thereby of *feeling* and *thinking* ... The principles em-bodied in this way are placed beyond the grasp of consciousness, and hence cannot be touched by voluntary, deliberate transformation, cannot even be made explicit” (Bourdieu 1993: 93-4). It is possible to see here the emergence of a similarity with the style/function dichotomy which we noted earlier in relation to the artefact. The vast majority of our actions cannot be perceived as entirely shaped by functional prerequisites, there exists a diversity of ways in which they can be performed, (just think of the variety of methods of walking that exist), ways that are open to socio-cultural manipulation. This opens up the possibility for certain actions to be seen as more ‘appropriate’ than others within a culture, even though their results are the same. An obvious example, made explicit by Norbert Elias, is how manners came to shape our utilisation of cutlery. As Connerton explains; “the way in which knife, fork and spoon are held and moved was standardised step by step; the practice of using a fork was acquired slowly, as was the habit of taking liquid only with a spoon. By the end of the eighteenth century the French leisured upper class had fully elaborated the standard of table manners that came gradually to be seen as self-evident

in Western civilised society as a whole” (Connerton 1989: 83). Therefore, it can be argued, as Taylor does, that;

“children are inducted into a culture, are taught the meanings which constitute it, partly through inculcation of the appropriate habitus. We learn how to hold ourselves, how to defer to others, how to be a presence for others, all largely through taking on different styles of bodily comportment. Through these modes of deference and presentation, the subtlest nuances of social position, of the sources of prestige, and hence of what is valuable and good are encoded” (Taylor 1993: 58).

As Bourdieu himself writes:

“Adapting a phrase of Proust’s, one might say that arms and legs are full of numb imperatives. One could endlessly enumerate the values given body, *made* body, by the hidden persuasion of an implicit pedagogy which can instil a whole cosmology, through injunctions as insignificant as ‘sit up straight’ or ‘don’t hold your knife in your left hand’, and inscribe the most fundamental principles of the arbitrary content of a culture in seemingly innocuous details of bearing or physical and verbal manners, so putting them beyond the reach of consciousness and explicit statement” (Bourdieu 1990b: 79).

Ultimately, “what is learned in the body is not something one has, but something one is” (ibid: 73). Although this may sound like a rather deterministic position Bourdieu would deny such an accusation, he does not see us as involved in a mechanistic

process whereby habitus is taken up and reproduced exactly. Instead habitus 'guides' action, they allow a degree of individual manoeuvre within limits; they are thus both enabling and restrictive.

Three dimensions of knowledge

We are now in a better position to outline a scheme of how people confront artefacts as meaningful objects, a scheme which can incorporate the disparate aspects of this process identified during the course of this study. As already implied, and in contrast to the majority of typologies discussed above which divided knowledge into two more or less distinct categories, the present system will consist of three forms or dimensions of knowledge which are interconnected. The nature of these connections will be outlined after the three forms have themselves been described.

The first dimension of knowledge to be distinguished is that of an essentially discursive nature, one which corresponds to those forms described by Giddens, Bloch, Langer, Hodder, Squire, and Pelegrin which all share a common feature, namely consciousness of this type has the capacity to be made explicit by being expressed linguistically. Discursive knowledge includes categories, relationships, primary and secondary meanings about objects and their uses which can be expressed in speech or writing. Such symbolic or theoretical knowledge appears to rest on the brain's ability to

organise a proportion of the information we acquire in a linguistic fashion, thus many of our ideas concerning artefacts are arranged in a sentential manner, they are linear and sequential in character. Obviously the actual depth of such knowledge varies from person to person, (the amount I could say about the workings of a television would be pitiful in comparison to that of an electrician), but just as we have some degree of discursive penetration of the social systems to whose constitution we contribute, the same is also true of the artefacts we encounter; we understand at a discursive level many of the features of objects quite readily.

This level of awareness, determined by our ability to put things into words, brings with it a number of important consequences. Primarily, it implies a degree of 'openness' in the sense that the artefact's characteristics are expressed through an inherently social medium, consequently this form of knowledge can be shared without much difficulty within a linguistic culture, (not to mention the possibility that it can be translated into other languages). Furthermore, it possess the capacity to be recorded in various forms and therefore the ability to be disseminated in a variety of ways; as such, discursive knowledge is the most easily transmittable of the three forms described here. Another factor which promotes this state of affairs is that discursive knowledge, unlike the other two dimensions, does not rely on the presence of the artefact, its absence need not make such information meaningless. We can therefore be told about a specific object, gain an understanding of it, without it being there in front of us.

These can be seen as the positive aspects of discursive knowledge, yet, although it may be perceived as the most refined and explicit forms of consciousness with respect to artefacts, it comes at a price. As we discussed earlier the time and neurological potential required to think in this way would severely limit the amount and complexity of our interactions with artefacts. Consequently, in the majority of our dealings with these things we do not, indeed we cannot, think of them in this way. When using a can-opener that I am familiar with I do not think about how such a task should be performed in a linguistic fashion, I do not need to set out such knowledge in a sentential way in order to operate the utensil. Indeed, I may find certain aspects of its use difficult to describe in words and the same could be true of its form. This may be due, in part, to the limits of language; for all its refinement we encounter great difficulties in putting certain experiences into words. As Miller notes;

little has been said on “the inadequacies and crudity of language when faced with objects in everyday interaction. This point is easily illustrated through a simple reflective exercise. Imagine for a moment attempting to describe in detail the difference in shape between a milk bottle and a sherry bottle, or the taste of cod as against haddock, or the design of some wallpaper. Clearly, compared with our ability to make fine discriminations of perceptual qualities and immediately recognise and discriminate amidst a profusion of ordinary objects, linguistic description may appear slow and clumsy” (Miller 1993: 98).

Wittgenstein wrote that although we could see beyond the limits of language we could not speak beyond them and “what we cannot speak about we must pass over in

silence” (Wittgenstein 1988: 74). The remaining two forms of knowledge are essentially non-linguistic in nature, thus making them difficult to acknowledge and discuss, however drawing on our previous discussions an attempt will be made.

All of the theorists whose schemes of knowledge we have discussed noted the presence of a type of understanding other than a discursive form and, with the exception of Giddens, they viewed it as being fundamentally non-linguistic. Following this line of thought the second dimension of knowledge to be described here, practical knowledge, is also to be conceived of as non-linguistic in character. Consequently, it is not viewed as being organised in a linear and sequential manner, but is made up of parcels or chunks of information which can be thought of as more analogous to an image rather than a piece of discourse. As such it forms a vast stock of information possessed by us all which is stored in a comparatively implicit form. These parcels of practical knowledge are applied ‘whole’, although this does not mean that they cannot be ‘unpacked’, broken up into discrete elements so that they can be discussed discursively. However, just as it is difficult to segregate the component parts of a painting, so the task of putting into words the aspects that make up a parcel of practical appears difficult, resulting in a degree of distortion of the information involved. Unfortunately, by its very nature, the actual amount of distortion is hard to gauge for we cannot state explicitly what in fact has been distorted.

Approaching these parcels of knowledge from a different angle we can see some similarity between them and those types of concepts discussed earlier, i.e. exemplar representations or prototypes. These are somewhat nebulous entities fashioned out a loose collection of, sometimes non-necessary, properties. Significantly, such prototypes are not ideal, abstract representations, but relate to real physical instances, concrete cases, so that if we see the chunks of practical knowledge as akin to these entities we can conceive them as tied to our activity in the world. This connection has two elements; firstly, practical knowledge is formed through our activity, the parcels of information are the result of our interactions with, among other things, artefacts. Secondly, this knowledge is applied in real situations, when we are actually dealing with objects. As such it can be seen to share similarities with Pelegrin's notion of ideational know-how which is also based firmly on practical experience. When dealing with artefacts, especially if they are unfamiliar to us, we imagine, (i.e. devise new mental representations based on previous parcels of knowledge), how our forthcoming actions will affect it and any other consequences that may ensue. Once applied a new set of circumstances will arise, a different state of affairs comes into being, and thus fresh mental representations occur and others can be utilised. The ease, speed and efficiency of this process will depend, of course, on the novelty of the situation and the depth of experiences held by the actor.

Practical knowledge, being implicated with our involvement in the world, is associated with the acquisition of new skills and the ability to cope with novel situations, for

example when a mishap occurs, when we slip, when a tool breaks, etc. Our situation immediately comes back to our attention, we become aware of the different circumstances that now apply. Consequently, the object in use ceases to be 'transparent' to us, a 'gap' emerges once more between ourselves and the object. From such a position we may then just get back to the task in hand without giving it a second's thought or, alternatively, we may begin to assess what happened, to think discursively about the reasons behind the error.

The employment of mental representations or images adds further weight to the suggestion that practical knowledge is organised in packages of information for, as we have already noted, perceptions are not made up of discrete elements like words in a sentence, but are experienced simultaneously. However, we should not assume that, with all this talk of 'images' that practical knowledge is somehow a purely visual entity; we also possess parcels of practical knowledge allied to touch, smell, taste, sound and proprioception. Unfortunately, sociological work in these areas is extremely limited, (however, see Classen et al 1994 for some interesting pieces on the cultural history of smell), and I have found no studies that have tackled this subject from the position adopted here.

Another way of viewing practical knowledge is as a form of understanding which occupies a middle ground between discursive and embodied knowledge, one that allows movement between the two. Before entering a discussion of how this occurs a

description of the third and final way in which artefacts become meaningful objects to us has to be outlined. As already mentioned, sensori-motor or embodied knowledge is the least understood and most difficult to explain of the dimensions of understanding, yet it is essential in our everyday interactions with objects. Included in this category are all those intuitive operations and habitual actions carried out with artefacts, performances that occur ‘without thinking’. After Piaget we can propose that this form of knowledge is the first to develop, our earliest understanding of the world is gained through bodily actions in and upon our environment, reality becomes known through physical activity before the ‘higher’ modes of consciousness, before language, develops. However, embodied knowledge does not become marginalised once these other forms have evolved as Piaget implies, rather, following Merleau-Ponty and Bourdieu, it continues to play an important role in day-to-day life. The body may be said to possess knowledge in the form of repertoires of actions which can be applied to similar types of objects in similar situations, habits appropriate to artefacts of equivalents natures. For example;

“to know how to type ... is neither to know the place of each letter among the keys, nor is it to have acquired a conditioned reflex for each letter, which is set in motion by each letter as it comes before the eye. We know where the letters are on the typewriter as we know where one of our limbs is. We remember this through knowledge bred of familiarity in our lived space. The movement of the typist’s fingers may be describable; yet it is not present to the typist as a trajectory through space that can be described, but as a certain adjustment of the typist’s mobility. Here a meaningful practice does not coincide with a sign;

meaning cannot be reduced to a sign which exists on a separate 'level' outside the immediate sphere of the body's acts. Habit is a knowledge and a remembering in the hands and in the body; and in the cultivation of habit it is our body which remembers" (Connerton 1989: 95).

Such is the depth of habitual knowledge or embodied understanding that when in full flow the objects in use come to be experienced, not as objects, but as extensions of the body. As Merleau-Ponty explains;

"the blind man's stick has ceased to be an object for him, and is no longer perceived for itself; its point has become an area of sensitivity, extending the scope and active radius of touch, and providing a parallel to sight. In the exploration of things, the length of the stick does not enter expressly as a middle term: the blind man is rather aware of it through the position of objects than of the position of objects through it. The position of things is immediately given through the extent of the reach which carries him to it, which comprises besides the arm's own reach the stick's range of action" (Merleau-Ponty 1967:143).

This is a common experience for us all; in our knowledgeable manipulation of objects, a knowledge gained through repetition and practice, they become 'transparent' to us. In the famous example of Heidegger's, when we possess the ability to hammer skilfully the hammer ceases to be an independent object of which we are continually aware, but instead becomes 'ready-to-hand'. Therefore, we acquire dispositions to act with objects in particular ways such that they are only 'brought to mind' when something goes wrong, when things become 'unready-to-hand' in Heidegger's phrase.

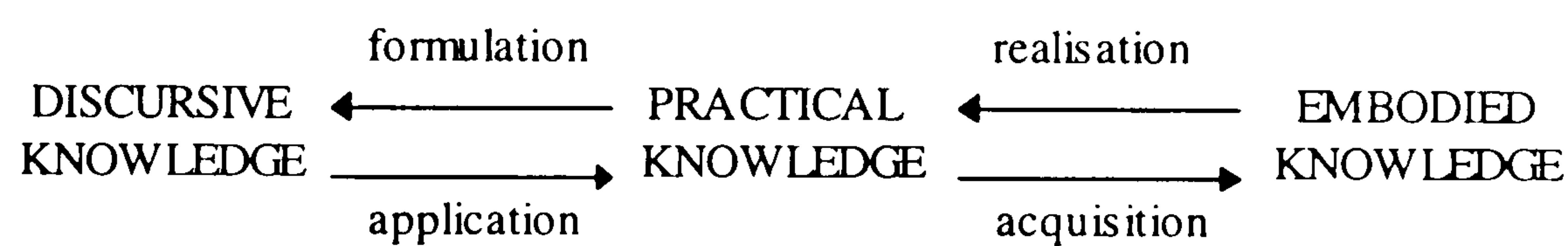
Two final points can be made in relation to this form of understanding. Unlike discursive knowledge, embodied knowledge can only be instigated effectively in the presence of the object to which it is related. Furthermore, change in the nature of embodied knowledge may also be seen to be more difficult, the appropriation of a new skill is usually harder than changing ones mind over the meaning of an object.

That these forms of knowledge are in some sense idiosyncratic may be argued by way of a couple of illustrations. Firstly, it is possible for us to operate on two levels simultaneously, we can apply two forms of understanding to two separate artefacts at the same time. Thus, we can discuss the merits of a pencil sharpener (discursive knowledge) while at the same time driving a car (embodied knowledge). Somewhat strangely it is often the case that when we apply both of these forms to the same object simultaneously, when we think discursively about an act that we are skilful at performing a kind of clumsiness ensues. As Polanyi observes, “if a pianist shifts his attention from the piece he is playing to the observation of what he is doing with his fingers while playing it, he gets confused and may have to stop” (Polanyi 1973: 56). This apparent friction between different forms of knowledge concerned the same object exhibits itself in another way as illustrated when learning how to reverse a trailer. We know that we must turn the steering-wheel in the opposite direction to that which is normal when reversing (discursive knowledge), but we ‘feel’ that this wrong (embodied knowledge); we have to fight against ourselves in order to achieve our aim.

Although these examples are far from conclusive they do seem to point towards some kind of segregation between the three dimensions of knowledge.

Knowledge in action

This description of the three dimensions of knowledge portrays them in such a way that they come across as separate and static entities. However, this is far from the case for they exist in a system of dynamic relationships so that they continually effect and impinge upon each other. This system can be expressed in a simple diagram.



To explain this diagram let's return to the act of driving by way of illustration. To begin with, as a complete novice, and possibly even before getting into the car, the driving instructor can describe to us in words what the various controls do and the basic physical actions required to set the car in motion. Consequently, we gain a discursive knowledge of the car and how to drive it. When we proceed to the physical act of driving we practically apply this knowledge, from knowing (discursively) that to

get going we must release the clutch at the same time as we depress the accelerator, we then have to physically gauge the amount of pressure required by both feet to perform these operations and how they should be combined. We therefore continually assess our physical movements, an interplay ensues between ourselves and the vehicle during which representative schemes develop to cope with the vast amount of information involved in this process; we slowly come to terms with this new situation by applying practical knowledge. Gradually through practice, through repetition, we may come to stop thinking about our actions and just carry them out, we acquire the skill of driving to the extent that our body knows what actions to perform without any need to think about them. The car, in effect, becomes an aspect of our phenomenal body, an extension of ourselves. However, we may make a mistake and immediately our interactions with the car are brought back to our attention. The car becomes experienced as something separate from us as it was when we first began learning how to drive. For example, we could have changed from second to fourth, missing out third gear. We realise that we have made a mistake and once realised we can assess its nature and the consequences that flow from it; we can, to a degree, put into words, if not the reasons behind it, what the mistake was. Consequently, after some thought, we may come to the conclusion that this mishap is in fact a better alternative in certain circumstances than going up through all the gears and we may tell others of our discovery. Hence, we can use this new, now discursive, knowledge and, depending on what happens during its application when practical knowledge is utilised, we acquire the habit of changing from second to fourth without thinking.

This example illustrates the way in which a continuous process of understanding involving the three forms of knowledge can occur through our activity with an object. However, there is no necessary reason why all three need to be involved. For instance, we could be told how to drive, apply this knowledge and fail to gain any competence whatsoever; we can then formulate reasons or excuses as to why this has happened. Here we have just discursive and practical knowledge involved, yet this is not to imply that when only these two forms are involved failure is the only outcome. For example, an art critic may possess a great amount of discursive knowledge about a certain painter and, when confronted with a new canvas by the artist, applies this knowledge in a practical sense. Any fresh information which may result from this encounter can be formulated into words and so be incorporated back into discursive knowledge.

A process can likewise occur which includes only practical and embodied knowledge, especially in cases where we learn by imitating other people's actions without the use of verbal instructions. When a child acquires the skill of using a spoon properly or when we learn how to play a sport this often does not and cannot, in the case of the child, involve discursive knowledge. It is pointless to tell a child who cannot yet understand language how to operate a spoon, it learns by copying the actions of others and by practising itself. This is not to deny that such knowledge could eventually be formulated at a discursive level, but I personally have not until this moment ever thought discursively about using a spoon.

Conclusion

One of the most important points to emerge from the discussion above is the fact that that we literally know more than we *think* we know. In other words, the limits of the knowledge we possess go beyond those which can be thought, knowledge is not circumscribed by thought, the two are not coterminous. As a consequence of our physical activity in the world our understanding of it is conceptual, practical and embodied; therefore much of this knowledge occurs without thinking, without reflection - I know the form of the pen I use, I know how to pick it up and hold it, I know the amount of pressure required to write with it, etc. Without this 'unthinking' knowledge normal life would be impossible; we shall return to this theme in the penultimate chapter.

In this chapter we have discussed a tripartite scheme which attempts to provide a method of understanding how we act towards artefacts in a meaningful way. However, in an important manner this system is a falsehood, it present us with a distorted picture or, at best, one that lacks a vital element; this is, of course, the active artefact. As a result this chapter is somewhat deficient, because in the discussion above the artefact has, for the most part, been presented as something which we perceive, understand, manipulate, mould and consume without limitation, thus the impression is made that we are the only active participants in our relations with these objects. Concomitantly, the artefact appears as a static phenomenon, passive to our whims. Our scheme,

therefore needs to be developed so as to incorporate the active artefact, we have to recognise the ways in which it can influence us, the ways in which it is a dynamic agent in our material relations. A discussion of how this occurs will constitute the opening section of the next chapter.

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Artefacts and Agents

Introduction

So far we have concentrated purely on how objects become meaningful to us through the three forms of knowledge which we have identified. But this is, of course, only half the story because we have ignored the active role played by the artefact; our scheme has portrayed human agents as the only effective elements, consequently the implication is that objects are passive things. Furthermore, these forms of knowledge can be applied to all objects and as such no distinction emerges between the products of human activity and natural objects. Therefore, what needs to be addressed is how artefacts can impact upon us, how they are active participants in our relations with them and, accordingly, how this distinguishes them from natural objects. To these ends let's begin by explaining the ways in which artefacts 'tell us how to behave'; how they can, usually in an implicit manner, guide our actions in the world and thus influence the way we come to understand the world. The methods whereby this is achieved can be seen to occupy a continuum, at one extreme we are influenced by properties associated with the very physicality of the artefact and at the other by the relationships between artefacts.

Active Artefacts

In the first instance one aspect of the materiality of the artefact is that our bodies must take on certain postures in order to accommodate them. As such the material nature of human products can be seen to set certain limits as to how we can physically interact with them, while at the same time guiding us as to the most appropriate way to approach them. Take the example of a screwdriver, its particular form induces us to shape our hand in a distinctive way in order to grasp it and then use it in a practical fashion. There are a number of attitudes which the hand can take, but they are limited by the tools' composition. In his novel *The Mezzanine* Nicholson Baker provides us with another illustration with regards to coffee cups and mugs.

Mugs' "larger handles allow a pluralism of grasps - for instance, the two, sometimes three fingers around the handle (cups allow only one finger); or the common one finger hooking the handle and the thumb and other fingers tripoded onto the body of the mug; or the two-palm grip, ignoring the handle completely, that actresses use when they are playing people having real-life conversations at the kitchen table. The cup forced a primness and fayness to the hand and even caused some pain to the joint of the middle finger which at other times shouldered a pen or pencil, because of the exaggerated distance between the cup's handle and the central weight of the liquid it was supporting" (Baker 1990: 78).

The form of virtually all artefacts provides clues as to how we should approach them, they project what Donald Norman terms ‘affordance’ which refers to “the perceived and actual properties of the thing, primarily those fundamental properties that determine just how the thing could possibly be used” (Norman 1988: 9). Concomitantly, artefacts also offer constraints, limitations to our actions with them. Combined, affordances and constraints facilitate our activities with artefacts; Norman offers an example.

“When we approach a door, we have to find both the side that opens and the part to be manipulated; in other words, we need to figure out what to do and where to do it. We expect to find some visible signal for the correct operation: a plate, an extension, a hollow, an indentation - something that allows the hand to touch, grasp, turn, or fit into. This tells us where to act. The next step is to figure out how: we must determine what operations are permitted, in part using the affordances, in part guided by constraints.” He goes on, “consider the hardware for an unlocked door. It need not have any moving parts: it can be a fixed knob, plate, handle, or groove. Not only will the proper hardware operate the door smoothly, but it will also indicate just how the door is to be operated: it will exhibit the proper affordances. Suppose the door opens by being pushed. The easiest way to indicate this is to have a plate at the spot where the pushing should be done. A plate, if large enough for the hand, clearly and unambiguously marks the proper action. Moreover, the plate constrains the possible actions: there is little else that one can do with a plate except push. Unfortunately, even this simple clue is misused. Doors that should be pulled or slid sometimes

have plates. Doors that should be pushed sometimes have both plates and knobs or a handle and no plate” (ibid: 87-8).

Artefacts thus have the potential to ‘lie’, they possess the potential to misdirect us in our actions towards them. However, for the most part, what they tell us is usually correct and so ‘obvious’ that the actions which they inspire require no thought. An instance of just how profound and yet unrecognised the impact artefacts have upon us is afforded by Marcel Mauss. In his lecture *Techniques of the Body* he argues that all our actions are the result of a combination of biological, psychological and sociological factors, using walking, swimming and running as illustrations. With reference to walking Mauss notes that whilst ill in a New York hospital

“I wondered where previously I had seen girls walking as my nurses walked. I had the time to think about it. At last I realised that it was at the cinema. Returning to France, I noticed how common this gait was, especially in Paris; the girls were French and they too were walking in this way. In fact, American walking fashions had begun to arrive over here, thanks to the cinema” (Mauss 1973: 72).

Mauss proceeds to expand upon this idea describing how different societies and groups within a society acquire various forms of gait and concludes that “there is perhaps no ‘natural way’ [of walking] for the adult”; although, of course, certain restrictions are imposed by our physiology. He then leaves us with the interesting thought, “*a fortiori* when other technical facts intervene: to take ourselves, the fact

that we wear shoes to walk transforms the positions of our feet: we feel it sure enough when we walk without them” (ibid: 74). Therefore, once shod, our actions, our posture is immediately affected, (we ‘teeter’ in stilettos, ‘stump’ in heavy boots, etc.); shoes as ‘technical’ objects impact upon us to a considerable, though largely unrecognised, extent. Through our repeated use of artefacts we come to assume, habitually, certain bodily postures and actions, thus, in Connerton’s words,

“patterns of body use become ingrained through our interactions with objects. There are the apparently automatic, long familiar movements of artisans, the way a carpenter wields a plane and the weaver uses a loom, so habitual that, if asked, they would say that they had a feeling of the proper management of the implement in their hands; there are the ways that working at a machine or at a desk imposes and reinforces a set of postural behaviours which we come to regard as ‘belonging’ to the factory worker or the sedentary white-collar worker. Postures and movements which are habit memories become sedimented into bodily conformation. Actors can mimic the impressions, doctors can examine the results” (Connerton 1989: 94).

The physical nature of the artefact can, therefore, be said to constitute one set of parameters, in a sense distinct from those defined by the forms of understanding we discussed previously, which help influence the ways in which we act in the world. For instance, if we are given the task of carrying a large object which is fairly heavy, say a water container, its physical characteristics limit the number of methods by which it can be transported by hand; we can hold it in both arms in front of the body, rest it on

our back and brace it with our hands or support it on our head. Each is of equal efficacy hence which of these is actually employed will depend on the type and content of understanding applied at the time. Custom may inform us, through discursive knowledge in the shape of verbal instructions or practical knowledge via imitation, that there is an appropriate way to carry heavy objects. The same may be true, but with custom being replaced by know-how originating from health and safety experts. In both cases techniques are acquired through practice, they are not naturally predetermined, and in both cases the method applied may be incorporated within embodied knowledge through continued employment. Whatever the outcome an interplay exists between understanding and the consequences emerging from the physical aspects of the object. A further illustration, again from Mauss, highlights the difficulties that can arise when an already acquired technique is applied to a novel implement.

“During the war I was able to make many observations on [the] specificity of techniques. E.g. the technique of *digging*. The English troops I was with did not know how to use French spades, which forced us to change 8,000 spades a division when we relieved a French division, and vice versa. This plainly shows that a manual knack can only be learnt slowly. Every technique properly so-called has its own form” (Mauss 1973: 71).

What Mauss’s example shows is that the type of object via which a skill is learnt helps shape the nature of that skill. When he writes that the English troops did not know

how to use French spades obviously he does not mean this literally, rather he is saying that the technique of digging with one type of spade is not immediately transferable to another sort. The character of the spade, therefore, has a direct impact upon the technique of digging, it bears directly on the form of that technique - a novel spade thus requires a new technique of use.

Another way in which the physical nature of the artefact affects our behaviour is in its capacity to help recall embodied knowledge. Embodied knowledge, as we have just seen, is tied to specific objects and a renewed acquaintance with such an object more often than not results in the body 'remembering' particular actions. As Ellen Scarry explains,

"what is 'remembered' in the body is well remembered. When a fifteen-year-old girl climbs off her bike and climbs back on at twenty-five, it may seem only the ten year interval that her body has forgotten, so effortlessly is the return to mastery - her body, however slender, hovering wide over the thin silver spin of the narrow wheels. So, too, her fingers placed down on piano keys may recover a lost song that was not available to her auditory memory and seemed to come into being in her fingertips themselves, coming out of them after the first two or three faltering notes with ease, as though it were only another form of breathing" (Scarry 1987: 109).

It is in the presence of certain artefacts that embodied knowledge is recalled and previously learned actions are once more performed. Furthermore, embodied

memories associated with artefacts appear quite deep rooted, it seems very difficult to forget how to ride a bike.

Two other important factors arising from the artefact's physicality, which are closely associated to the circumstances just discussed, may be viewed as providing the basis for Giddens' notion of ontological security; these are the artefact's resistance to our actions and its capacity to exist unchanged through time. It will be recalled that, according to Giddens, in order to guard against anxiety-provoking stimuli (doubt, mistrust, etc.) unconscious mechanisms are established to form a basic security system which achieves its end by promoting routine activity. The nature of these actions are inherently social, the first occurring between child and mothering agent, and it is only as a consequence of this act of primary socialisation that our knowledge of the world can develop. Giddens' argument runs like this:

"Reality is not just the here-and-now, the context of immediate sensory perception, but identity and change in what is *absent* - out of sight for the moment or, indeed, never directly encountered but simply accepted as 'there'. Learning about external reality hence is largely a matter of mediated experience. Although most of the richer textures of such experience depend on differentiated linguistic details, a grasp of the qualities of external reality begin much earlier. Learning the characteristics of absent persons and objects - accepting the real world as real - depends on the emotional security that basic trust provides. The feelings of unreality which may haunt the lives of individuals in whose early childhood basic trust was poorly developed may take many

forms. They may feel that the object-world, or other people, have only a shadowy existence, or be unable to maintain a clear sense of self-identity” (Giddens 1992: 43).

Objects only become known to us, therefore, through a form of social mediation, as a consequence of trust: “trust in others, in the early life of the infant and, in chronic fashion, in the activities of the adult, is the origin of the experience of a stable external world and a coherent sense of self-identity” (ibid: 51). Yet this whole argument rests upon rather shaky foundations for how does the child first recognise this source of trust, the mothering agent, from all the other objects in its environment? As Margaret Archer states;

“as far as babies are concerned, the experience of others is the experience of *objects*. Persons impinge from the outside world, but in a manner initially undifferentiated from other objects, both animate and inanimate, which do likewise ... Trust in others cannot be the source of experiencing the stable external world, since at the start of life other people can only be experienced as part and parcel of their external world” (Archer 1995: 123).

Consequently, in early childhood at least, objects play as essential a part in the formation of the babies’ identity as do people. Following Piaget we can argue that, through our physical contact with the objects, we acquire knowledge of ourselves and them, of self and non-self. The solidity of objects help define the boundaries of ourselves, it promotes the notion that we too are physical beings and, to a degree, this

process may continue through life, we often find solid objects more ‘reassuring’ than frail ones.

This could be true in another sense, in that physical things artefacts possess the ability to endure more or less unchanged through time. If we accept that ontological security comes about to some extent through routine activity then the continued presence of objects can be seen to play a central role in this procedure; the familiarity of objects breeds contentment. Such a belief is expressed by Joseph Conrad in *Under Western Eyes*:

“the sense of life’s continuity depended on trifling bodily impressions. The trivialities of daily existence were an armour for the soul. And this thought reinforced the internal quietness of Razumov as he began to climb the stairs familiar to his feet in the dark, with his hand on the familiar clammy banister. The exceptional could not prevail against the material contacts which make one day resemble another. To-morrow would be like yesterday” (Conrad 1992: 53-4).

We encountered a similar notion formulated by Arendt earlier on in this study, for her “human artefacts bestow a measure of permanence and durability upon the futility of mortal life and the fleeting character of human time” (Arendt 1989: 8). Later she goes on to state that “the things of the world have the function of stabilising human life, and that objectivity lies in the fact that - in contradiction to the Heraclitean saying that the same man can never enter the same stream - man, their ever-changing nature

notwithstanding, can retrieve their sameness, that is, their identity, by being related to the same chair and the same table” (ibid: 137). We need not go as far as this, it seems enough just to propose that our self-identity is supported to some degree by familiar objects, their invariable existence grounds our own life, they offer stability through their immutability by reassuring us that we too are not purely effervescent beings.

Related to this is the notion that we are often perceived, by ourselves and others, not so much as individuals with distinct personalities, but as possessors of things - we are defined by what we own. Such an idea has a long history, in 1892 William James wrote that “*a man’s Me [i.e. self] is the some total of all that he CAN call his*, not only his body and his psychic powers, but his clothes and his house, his wife and his children, his ancestors and friends, his reputation and works, his land and his horses, and yacht and bank-account” (James 1984: 160). However, this reliance on artefacts is often seen in a negative light. Pushed to its extreme this state of affairs may result in the agent being identified completely with their property, whether this be due to socio-economic circumstances and the fetishism of commodities or to an existential desire to flee into bad faith by attempting to become a being-in-itself. Any subsequent loss of an object may, therefore, be experienced as a loss of self, a sense of alienation or a feeling of inauthenticity. It is interesting to note that feelings of antipathy towards artefacts and the material world in general stretch back thousands of years, finding their expression in Gnosticism and later surfacing in Manichaeism and Albigenianism; all three share a belief that matter is inherently evil and the spiritual essentially good.

However, in complete contrast, under certain conditions even the most meagre of artefacts can be experienced as embodying goodness. As Scarry writes,

“it is almost universally the case in everyday life that the most cherished object is one that has been hand-made by a friend: there is no mystery about this, for the object’s material attributes themselves record and memorialise the intensely personal, extraordinary because exclusive, interior feelings of the maker for just this person - This is for you. But anonymous, mass-produced objects contain a collective and equally extraordinary message: Whoever you are, and whether or not I personally like or even know you, in at last this small way, be well. Thus, within the realm of objects, objects-made-for-anyone bear the same relation to objects-made-for-someone that, within the human realm, *caritas* bears to *eros*. Whether they reach someone in the extreme conditions of imprisonment or in the benign and ordinary conditions of everyday life, the handkerchief, blanket, and bucket of white paint contain within them the wish for well-being: ‘Don’t cry; be warm; watch now, in a few minutes even these constricting walls will look more spacious’” (Scarry 1987: 292).

In following this line of argument we have digressed somewhat from our original path, returning to matters discussed in the previous chapter which related to how we impose meanings upon artefacts. However, we have been noting in this chapter how artefacts are also active participants in our relations with them, active and therefore in a sense ‘knowledgeable’. This is Scarry’s contention; artefacts are knowing things in that they are the crystallised and projected knowingness of their makers.

“Everyday artefacts ... are themselves usually characterised by forms of materialised awareness that go far beyond their most immediate use: the door to the boiler room that in its design a childhood latch is not only able to ‘understand’ and accommodate the timing of the person’s erratic wish that it be now-a-wall-now-not-a-wall, but is also able to ‘differentiate’ small persons from persons in general, and ‘knows’ that the former is a special subcategory of the latter whose wishes should not be accommodated” (ibid: 304).

Scarry offers us another interesting example of the projected knowingness of the producer into the artefact.

“What is it that this aspirin bottle - with its long history in the bark of the willow tree and the bowl of the Indian peacepipe - ‘knows’ about the human world? It knows about the chemical and neuronal structure of small aches and pains, and about the human desire to be free of those aches and pains. It knows the size of the hand that will reach out to relieve those aches and pains. It knows that it is itself dangerous to those human beings if taken in large doses. It knows that these human beings know how to read and communicates with them on the subject of amounts through language. It also knows that some human beings do not yet know how to read or read only a different language. It deals with this problem by further knowing how human beings intuitively and habitually take caps off bottles, and by being itself counterintuitive in its own cap. Thus only someone who knows how to read (or who knows someone else who knows how to read) can take off the cap and successfully reach the aspirin which, because the person not only knows how to read but has been made to stop and be reminded to read, will be taken in the right dosage. It contains within its design a test for helping

to ensure responsible usage that has all the elegance of a simple three-step mathematical proof. Civilisation restructures the naturally existing environment to be laden with human awareness” (ibid: 305).

The physicality of artefacts can, then, be perceived as playing an active role in our dealings with them. These relationships are inherently social due to the fact that artefacts are the products of human industry, artefacts are the embodiment of previous activity which can then affect our present activity, artefacts are the result of human objectification. Through objectifying ourselves in our material creations we possess the ability to influence others far removed in time and space, we endow the artefact with dispositional properties which have the potential to be realised by someone coming into contact with it. Consequently, the possibility arises that in the case of certain artefacts, say those from prehistoric times, although they may be meaningless on one level, we possess little discursive knowledge about them, they can still inform us through the actions which they inspire. For example, their physical form generates certain bodily attitudes when approaching and handling them, the way in which an implement can be grasped, say. By its very nature this knowledge is difficult to conceptualise, but it does offer a point of entry into the understanding of an artefact and thus cultures separated by time and space.

As artefacts possess the capacity to persist through time the present contains a vast accumulation of human products, contemporary life contains survivals from both

yesterday and many thousands of years ago which can guide our present activities.

Being, in a sense, *material* records of the past

“they do not”, in the words of Barbara Adam, “depend on our knowing or remembering for their existence. As message-bearing survivals, they may be listened to, used, or neglected. As such they form part of the social inheritance of any society and constitute the condition of articulate, practical activity. They are utilised for action but do not in themselves become an object of inquiry” (Adam 1994: 146).

Consequently, not only do artefacts act as the medium through which previous or distant agents affect our present actions, but they also affect our actions with other co-present agents; “a world of things is between those who have it in common, as a table is located between those who sit around it; the world, like every in-between, relates and separates men at the same time” (Arendt 1989: 52). The nature of the artefact impinges upon the nature of the relationship between actors, (intimate meals are facilitated by being eaten at a small table, hindered by a large one). In certain circumstances they may actually constitute the relationship. Hodder provides us with an illustration;

“people with severe psychiatric disorders which involve an inability to relate to other people are sometimes treated by standing them in a circle and getting them to throw a ball between them. The thrown ball does not *represent* a relationship between thrower and catcher, it creates or *is* a relationship”. He goes on, “The basic starting point of a

ball linking two individuals can then be used as a metaphor for a social relationship. Grounded in the experience of throwing and catching the ball, the metaphor is based on the material likeness between exchanging a ball and the give and take of social relationships. At a yet more abstract level one could begin to categorise different types of exchange. The patient thus moves from the practice of throwing a ball to various metaphoric associations (understanding of which does not involve speech) and finally to the use of an abstract referential discussion using arbitrary signs of speech. The material act comes to refer and represent. Thus it comes to have language-like qualities, and yet its referential functions are built up from non-arbitrary associations rather than from abstract sets of differences” (Hodder 1995:204).

Artefacts can thus help define the ways in which people interact with one another and in particular cases actually compose the relationship.

Artefacts can also affect how we behave as a consequence of how they themselves are related, the relationships between artefacts can influence our activities. Artefacts are always and everywhere embedded within a context, a context which they play a large part in forming. The formation of contexts are, to varying degrees, not random processes, but result from the actions of agents behaving in a knowledgeable way, that is through the application of discursive, practical and/or embodied knowledge. Consequently, the material world can, to an extent, reflect the forms of understanding applied to it, they both contribute to how the material world is patterned while at the same time being constrained by that world. Concomitantly, the way in which we

understand this patterning can also take place through any of the three forms of knowledge outlined.

An illustration of how the relations between artefacts affect our behaviour is provided by Bourdieu in his study of the Kabyle people of Algeria. Bourdieu argues that much of the child's understanding of the social world is provided by the layout of the house and the placing of furniture and other artefacts (looms, water jars, kitchen utensils, etc.). Knowledge is acquired through moving through the house and by interacting with the artefacts, it is an embodied form of understanding. He writes that

“the ‘book’ from which the children learn their vision of the world [i.e. the house and its contents] is read with the body, in and through the movements and displacements which make the space within which they are enacted as much as they are made by it”. He continues, “all the actions performed in a space constructed in this way are immediately qualified symbolically and function as so many structural exercises through which is built up practical mastery of the fundamental schemes, which organise magical practices and representations: going in and coming out, filling and emptying, opening and shutting, going eastwards and going westwards, etc. Through the magic of a world of objects which is the product of the application of the same schemes to the most diverse domains, a world in which each thing speaks metaphorically of all the others, each practice comes to be invested with an objective meaning, a meaning with which practices - and particularly rites - have to reckon at all times, whether to evoke or revoke it. The construction of the world of objects is clearly not the sovereign operation of consciousness which the neo-Kantian tradition

conceives of; mental structures which construct the world of objects are constructed in the practice of a world of objects constructed according to the same structures. The mind born of the world of objects does not rise as a subjectivity confronting an objectivity: the objective universe is made up of objects which are the product of objectifying operations structured according to the very structures which the mind applies to it. The mind is a metaphor of the world of objects which is itself but an endless circle of mutually reflecting metaphors” (Bourdieu 1993: 90-1).

The relationships between artefacts and their context and ourselves is, therefore, one of mutual construction, although to describe it as an ‘endless circle’ may be seen to incite certain difficulties when we try to explain precisely what is happening. We need to ensure that a gap is retained between agent and artefact in order that we can distinguish how each affects the other.

The degree to which artefacts are understood through their relations with other artefacts within a context is highlighted by ‘The Fountain’, a work of art ‘made’ by Marcel Duchamp. This object was, in fact, a urinal which Duchamp purchased and then exhibited unchanged, apart from being signed and dated, in a New York gallery. By placing it in a different context among other works of art it was no longer understood as a purely functional artefact, an understanding which in all probability was never made explicit in everyday usage, i.e. discursive; instead it ‘became’ an aesthetic object and thus something to be understood discursively. The actions that it inspired were, hopefully, completely transformed just by moving it from one context to

another. This is a somewhat extreme example, yet it illustrates how the associations between artefacts have an impact upon behaviour and knowledge of the world.

A less unusual, though far from unrelated, case has been assessed by Stocking in relation to the display of artefacts in museums. According to him by being situated in a museum the artefact acquires four extra 'dimensions' on top of the three allied to space. Firstly, it gains a peculiar temporality for although it is usually historical, relating us to the dim and distant past, it simultaneously becomes timeless; "removed from history in the very process of embodying it, by curators seeking (among other goals) to preserve objects in their original form" (Stocking 1985: 4). Secondly, the placement of an artefact in a museum involves the dimension of power which has two aspects. On the one hand the expropriation of the artefact often occurred under dubious circumstances when the two parties involved possessed greatly disparate resources, whether they be financial, military, intellectual, etc. On the other hand,

"from the observer's perspective ... the power involved in that appropriation is largely external, since she or he neither 'owns' the objects in a literal sense nor defines their recontextualisation. Within these parameters a multitude of individual recontextualisations may occur, but within them also the recontextualised object may be said to exert a power over their viewers - a power not simply inherent in the objects, but given to them by the museum as an institution within a particular historical sociocultural setting" (ibid: 5).

Thirdly, there is the dimension of wealth, although this could be regarded as an aspect of power. Thus, “even before the political processes of modern nationalism defined it as such, material culture was, in a limited economic sense, ‘cultural property’. The very materiality of the objects of material culture entangled them in Western economic processes of the acquisition and exchange of wealth” (ibid: 6). Finally, there is the aesthetic dimension for, as Stocking explains,

“despite its history of exclusion from museums devoted to the fine arts, and of negative evaluation by universal humanistic and evolutionary aesthetic standards, the material culture of non-western peoples has undergone a process of aestheticisation since its original emplacement in museums ... Items that once had multiple functions, so that there aesthetic element could only be isolated by abstraction, have often had their functions reduced in scope by processes of acculturation, with the more utilitarian functions transferred to the products of Western technology. Insofar as they continue to be produced, items of traditional material culture are reconceptualised from both the native and the Western perspective in aesthetic terms - whether those of curio kitsch or fine art. Thus objects of ‘material culture’ - which in traditional contexts often had spiritual value - are respiritualised (in Western terms) as aesthetic objects, at the same time that they are subjected to the processes of the world art market” (ibid: 6).

A great deal more could be said on this specific subject, however, at this juncture it offers a good illustration of how contexts affect our attitudes and behaviour towards artefacts. As such it can be seen to occupy one end of the continuum mentioned at the

beginning of this section. One final point needs to be addressed concerning the artefact's impact upon the agent for, if we accept this premise, then the possibility arises that artefacts could be used by certain sections of society to influence the conduct of others. That is, as Stocking acknowledged, power relations can be played out through the artefact and one way that this can occur is by utilising it as an ideological device. Its effectiveness in this role emerges from its very simplicity or naturalness. According to Hodder,

“although material culture does have a referential function or can be given that function, its meanings are often associative, evocative and non-referential. Often material culture does not appear to ‘mean’ at all. This self-evident quality thus hides or masks the references that are being made. The ideological messages are hidden behind the supposed non-communicative nature of material culture. The duality of reference and non-reference suggests that material culture, in its pragmatic innocence, should play a powerful ideological role. Our difficulty in recognising this role is the basis of its success” (Hodder 1995: 207).

The basis of this difficulty may lie in the fact that ideology associated with material culture is deeply embedded in practical or embodied knowledge, it is not formulated discursively. Hodder cites the Kabyle's prejudice in favour of ‘straightness’ as described by Bourdieu in evidence to support such a claim:

“we might start from the obvious point that for spears to be effective they must be long and straight. We might also add the less obvious

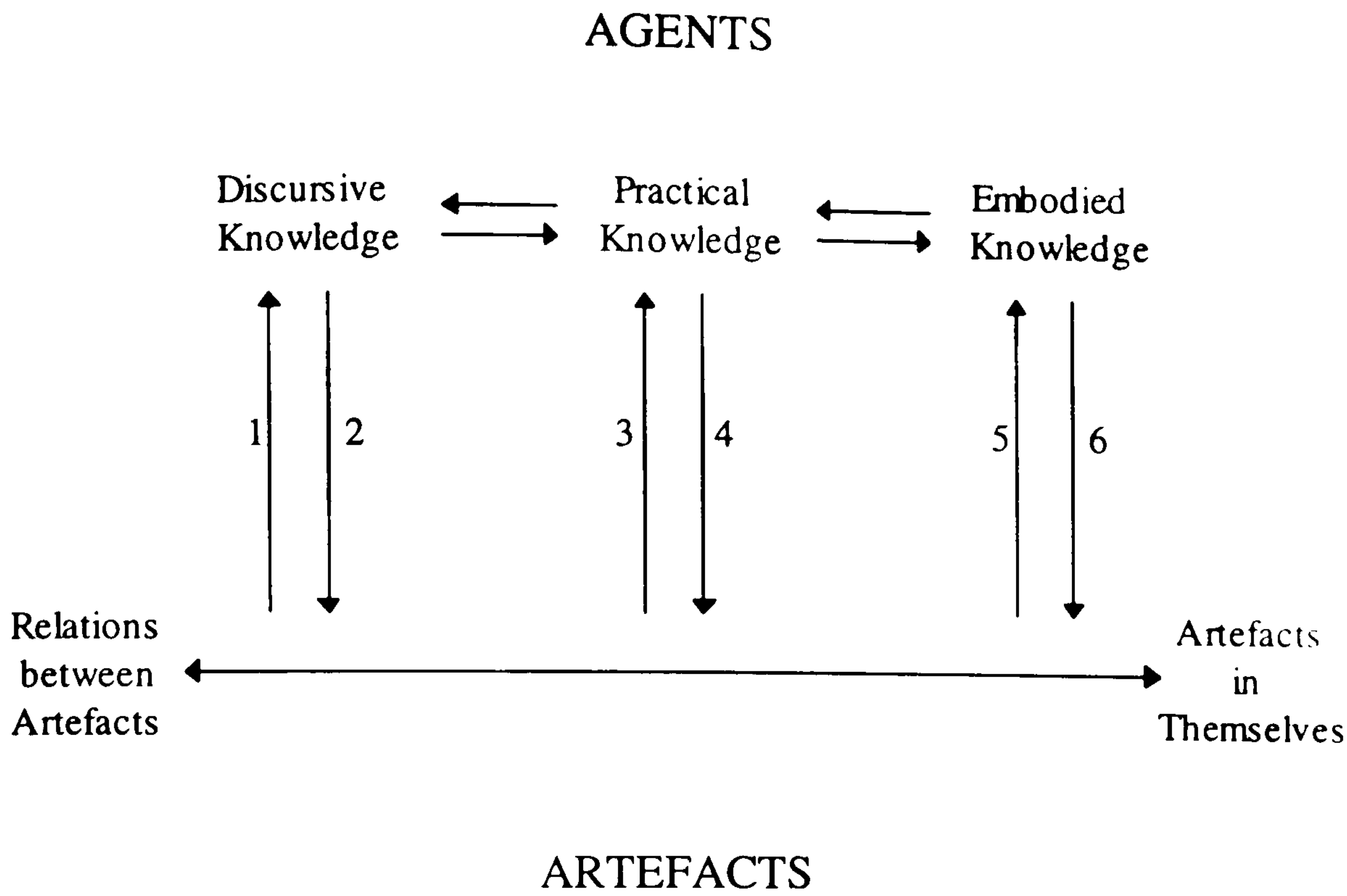
view that for them to be thrown with force young men need to do the throwing. Bourdieu shows how, in a particular cultural context, the notion of straightness can be linked (by metaphor) to valued notions of ‘talking straight’, ‘being straight’, as opposed to being bent over, submissive. Thus when men might be told to ‘stand up straight’ and in this simple statement a whole cosmology, a whole political philosophy concerning the relations between men and women is imposed. The metaphor that men are straight like their spears is based on a necessary technological knowledge (that spears have to be long and straight) which we all recognise but do not articulate” (ibid: 210).

Hodder concludes that,

“in so far as dominant groups in society want to promote certain ideologies in their own interests, they will need to control training and enculturation of practical activities. If successful ideologies are largely experienced at the level of practical [and, we may add, embodied], non-discursive consciousness then it becomes necessary to control the details of bodily movements and behaviour as the cultural rules are internalised through repetition and constraint. Children are taught to hold the knife in the right hand, to stand up straight ... In these ways a political philosophy is imbued” (ibid: 210).

A dialectical relationship

The artefact and the relations between artefacts can therefore be seen to affect us in a variety of ways, ways that are not necessarily easy to perceive. As such they may be said to constitute a distinct 'realm', distinct that is from the sphere composed of the three forms of knowledge which can be applied artefacts. For the most part this is an analytical separation, the two permeate each other in our everyday activity in the world making distinctions difficult. Yet a characteristic quality of artefacts is that they can exist, sometimes for many thousands of years, completely isolated and unknown to any human being. Once made they do not depend on human agency for their continued survival. This applies not only to the artefact as a physical thing, but also to the relations between them as they are rarely found alone. However, when these two active levels, agency and artefacts, are co-present the relations between them can be conceptualised. Hopefully some idea of how this occurs has emerged in the discussions above. To make it clearer we can elaborate on our previous diagram and portray it like this:



With respect to this figure one particular point needs to be made clear; as is the case with many diagrammatic representations the impression can be given that each ‘element’ constitutes a discrete unit only connected to the others by formal relations which are symbolised by the arrows. What is lost, therefore, is the significant way in which all the parts are involved in a dynamic process, our interactions with artefacts are essentially mercurial and never static. Consequently, there is a continuous interplay, not only between ourselves and artefacts, but between both the three forms of knowledge and between the different aspects of the artefact, (i.e. those associated with the artefact as a singular entity and those related to the relationships between artefacts). By recognising these factors all we are doing is acknowledging one of the obvious features of our everyday life, that we are continually participating in actions with and upon artefacts from our birth to our death. How, then, does the diagram

above help us to understand this state of affairs, especially its dynamic qualities? Let's return to our previous example of how we learn to drive a car by way of illustration.

Beginning in the top left-hand corner with discursive knowledge. This form of understanding, acquired from the driving instructor through speech, (and, possibly, from other sources of discursive knowledge such as books and pamphlets on road safety, etc.), relates to circumstances beyond us; it is directed towards an object, the car, which may or may not be present, a car that may not even exist. However, assuming the instructor to be trustworthy, the information which they impart pertains to the various controls, how they relate to one another, in what positions they will be found and in what way our actions towards them are to be combined in order to get the car in motion. This explanatory process is represented in the diagram by Arrow 2, as such discursive knowledge is applicable to the whole artefact continuum. Therefore, at the one end some of the information passed on by the instructor could relate to the physical nature of the controls, the car may have a 'heavy' clutch which requires some effort to depress when changing gear or it might need a little of choke, the choke knob has only to be extended a small distance to prevent the engine from flooding. At the other end of the continuum the information may refer to the positioning of the pedals, (the clutch being on the left, the brake in the middle and the accelerator on the right), the context in which they are placed and to the relationships between them, how they correspond to each other when the car is being driven. Arrow 2, therefore, accords to

discursive knowledge directed towards an artefact, the artefact constitutes the intentional object of discursive thought which can be expressed linguistically.

Arrow 1 refers to the ways in which artefacts inform us at a discursive level, consequently, as an experienced driver, when we get into a new car for the first time the positioning of the controls communicates to us what they do. In the case of the foot pedals, as physical objects, they are usually of a very similar nature and there is nothing in the form (touch, smell, taste even) of the brake pedal that signifies that when depressed it has the capacity to slow the vehicle down. By being found in the same relationships in all cars, by conforming to a standard arrangement, we need not experiment to discover what each pedal does. However, components can inform us how we should approach them by their physical nature, a rocker switch invites us to depress it rather than twist or turn it, a lever in a groove induces us to slide it rather than pull or push it - we can conjecture as to how to operate an instrument discursively without ever touching it. Hence, in the presence of an object a process can be seen to occur consisting of an interplay between agent and artefact whereby information travels in both directions, both sides affect the other when the two are co-present, both are active participants in this situation.

When a physical involvement with an artefact begins so does the involvement of practical knowledge. Once in the car and attempting to set off we must, as novices, try and operationalise the discursive knowledge we have acquired. However, for this to

happen it needs to be transformed into more easily manageable parcels of information, in coming to terms with this new situation we cannot deal with it on a purely discursive level. From my own experiences I can remember the confusion which transpired when I tried to think about each of the actions I had to perform simultaneously to get the car moving, to think about depressing the accelerator, releasing the clutch, looking in the rear-view mirror, etc. To think of all these things discursively at the same time only produces chaos; we have to bundle this knowledge up into easily tractable packages so that we can function more effectively. During the application of practical knowledge a 'gap' seems to exist between ourselves and the object, the object is continually being seen in a new light as we proceed to gain a better understanding through our interactions with it. Once we have become familiar with it, once this 'otherness' has been overcome, once we use it without thinking, practical knowledge ceases and embodied knowledge begins. This process is illustrated by Connerton using the example of how someone learns to play the piano.

"Here are chord A and chord B, separated by some distance along the keyboard. To play A you must have a tightly compressed hand; to play B you need an extended spread of the hand ... The distance between A and B cannot just be crossed; it must be spontaneously traversed in a specific manner. If you are to go correctly from A to B, your hand, indeed your whole body, must be directed from the start not just toward where B is; your hand must be preparing along the course of your journey to land in the right productional shape as it arrives at B in correct tempo. As your hand moves from A toward B a smooth course of changing hand shape must be accomplished; all the necessary minute

adjustments have to occur spontaneously and simultaneously in the appropriate reconfiguration of your hand and in a slight readjustment of your body. Beginners get from A to B disjointedly. They play A, and set out for B without going for it in the right way from the outset, without moving to the whole of B and in correct tempo. Before they have become skilled in playing scales, beginners hunt and peck at the keyboard, their fingers hesitate and lose their place. They continually sense a separation between the 'it' of the piano and the 'me' of the pianist. A more advanced pianist, playing a rapid and intricately winding passage and its reiteration, will frequently come close but slightly miss the mark; will have a sense of 'struggling to make it happen' and will 'sound like someone trying hard to say something'" (Connerton 1989: 91-2).

Arrow 4, therefore, corresponds to the application of practical knowledge, yet without the presence of Arrow 3 this process would be meaningless, practical knowledge can only develop through actions in the world. The object in hand, the car's controls, returning to our own example, inform us as to the proficiency of our actions; a continuous process of self-monitoring occurs, one reliant on the vehicle's ability to convey to us how well we are doing. As we unremittingly note the various effects produced by our behaviour on the pedals, gear stick, steering wheel, etc. so the parcels of practical knowledge develop. The arrangement of the instruments and their physical qualities set limits to what we can achieve, as long as we do not go beyond these parameters we will progress towards our goal of driving competently. However, if we do go beyond these limits the car will tell us that we have made a mistake, the engine screams, the vehicle stalls, etc. The same also applies to the experienced motorist who

has to 'feel' their way into driving a new car, tentatively working out how much pressure the pedals require, how sharp the steering is, etc.; again self-monitoring occurs informed by the controls.

Through continued repetition and practice the learner will hopefully, but not necessarily, become skilful at the task of driving. We acquire the capacity to act in a meaningful way towards the car without reflective thought, we have an embodied knowledge of the layout of the controls and their physical characteristics, we habitually know where they are and how to operate them. This corresponds to Arrow 6, the application of embodied knowledge. Embodied knowledge is only realised in action, in our physical activity in the world; consequently, it requires the presence of a specific object for its operation, a specific object because embodied knowledge is formed in relation to that object. Therefore, when one switches between different forms of the same artefact, say between different kinds of can opener, either practical or discursive knowledge is engaged depending on the level of differentiation; if the new object is quite distinct from the one previous used then we may have to think discursively about how it should be operated, how it should be placed with respect to the flange encircling the tin top, how it punctures the metal, etc. If, however, it is of a relatively similar design then all we need account for may be slightly longer or more substantial handgrips, a difference in colour, etc., variations which do not require discursive thought just the application of practical knowledge in order to recognise it as a can opener before embodied understanding quickly takes over. With the continued use of

the same object embodied knowledge is applied, thus artefacts are experienced prereflectively - an experienced driver does not have to think through the process of changing gear, the body knows how to do it 'automatically'.

One way of distinguishing between Arrows 2, 4 and 6 is to view them as exhibiting varying degrees of 'detachment' from the artefact, this being most apparent with regards to Arrow 2 (the application of discursive knowledge) and least obvious or totally absent with regards to Arrow 6 (the application of embodied knowledge).

Hubert Dreyfus believes that

"traditional philosophy has, since the time of Plato, maintained that knowledge is gained by means of detached, disinterested inquiry. Since Descartes, the results of such detached inquiries are supposed to have consequences concerning the nature of the subject and object of knowledge, not just in these special circumstances but for the whole range of human activities ... If, however, we step back from involved activity and become reflective, detached observers, we cannot help seeing ourselves as subjects contemplating objects. The whole array of philosophical distinctions between inner subjective experience and the outer object of experience, between perceiving and the perceived, and between appearance and reality arise at this point" (Dreyfus 1994: 45).

Embodied knowledge denies such a detachment from the world, from artefacts; much of our activity with things is characterised not by a sense of separation but by one of unity, the artefact becomes an aspect, an extension of ourselves. This immediate

involvement with artefacts, therefore, has important repercussions both epistemologically and ontologically, repercussions noted by Heidegger and Merleau-Ponty in particular. Heidegger argued that it is only in the use of an artefact, through our 'manipulation' of it, that we gain a full understanding of it, a 'primordial' understanding; knowledge gained purely through contemplation is second-hand. Yet this understanding is of a peculiar nature for, as we have just noted, the artefact is not consciously perceived when we are using it in the correct manner, it becomes 'un-experienced', transparent, it loses its identity. In Heidegger's words, "the peculiarity of what is primarily available is that, in its availableness, it must, as it were, withdraw in order to be available quite authentically. That with which our everyday dealings primarily dwell is not the tools themselves. On the contrary, that with which we concern ourselves primarily is the task - that which is to be done at the time" (Heidegger 1962: 99). As Dreyfus elaborates, taking up Merleau-Ponty's example of the blind man's cane;

"we hand the blind man a cane and ask him to tell us what properties it has. After hefting and feeling it, he tells us that it is light, smooth, about three feet long, and so on; it is occurrent [physically present, present-at-hand] for him. But when the man starts to manipulate the cane, he loses his awareness of the cane itself; he is aware only of the curb (or whatever object the cane touches); or, if all is going well, he is not even aware of that, but of his freedom to walk, or perhaps only what he is talking about with a friend. Precisely when it is most genuinely appropriated equipment becomes transparent. When hammering a nail, 'The hammering itself uncovers the specific 'manipulability' of the

hammer' (Heidegger 1962: 98), but I am not aware of any determinate characteristics of the hammer or the nail. All I am aware of is the task, or perhaps what I need to do when I finish" (Dreyfus 1994: 65).

As such, the artefact becomes an aspect of the phenomenal body, the boundaries of the self are extended beyond our corporeal body. Consequently, the artefact affects us (Arrow 5) at the same time as we affect the artefact (Arrow 6), there exists no sense of discontinuity between ourselves and the object in hand. It is only when a mishap occurs, either on our behalf (we change into the wrong gear) or on behalf of the artefact (the clutch cable snaps), that this union is broken and a gap appears, detachment emerges; only in a state of continuous, smooth-running involvement do objects remain transparent. Therefore, according to Heidegger,

"we do not always and continually have explicit perception of the things surrounding us in a familiar environment, certainly not in such a way that we would be aware of them expressly as available ... In the indifferent imperturbability of our customary commerce with them, they become accessible precisely with regard to their unobtrusive presence. The presupposition for the possible equanimity of our dealing with things is, among others, the *uninterrupted quality* of that commerce. It must not be held up in its progress" (Heidegger 1982: 309).

When it is held up our attention is grabbed, practical and/or discursive knowledge is engaged depending on the severity of the problem. In fact, sometimes it is only when our absorbed, ongoing activity is interrupted that theoretical reflection on the present

circumstances occurs - “if knowing is to be possible as a way of determining the nature of the occurrent by observing it, then there must first be a *deficiency* in our having-to-do with the world concernfully” (Heidegger 1962: 88). Take, for example, the snapping of the clutch cable; the pedal drops to the floor offering no resistance to our left foot, we immediately sense a difference in our circumstances, it springs to our attention. We press the pedal a couple of times in an effort to understand what has happened and then begin to ponder about the problem and the reasons behind it, possibly contemplating for the first time on the nature of the clutch cable and the possibility that it can snap. From embodied knowledge we end up thinking discursively about the present situation. In the case of a relatively minor mishap, say our foot slips off the clutch pedal, such reflection is not required, we need not think discursively about how to rectify the problem.

Ultimately, as we noted in the previous chapter, all three forms of knowledge need not be involved in our dealings with an object, yet, with respect to the artefact itself, all those aspects proposed to exist on the continuum do impact upon one another and so are simultaneously present. Therefore, returning to our art critic example, both the painting itself and its relationship to other artefacts has an effect on how the canvas is understood. Ernst Gombrich highlights the importance of the latter element by describing the role played by the frame. As Miller explains,

“following Kant, many aesthetic theories emphasise the particular manner or attitude of regarding the object; for example, the way a work

of art commands our concentration and consideration, producing an abstracted and contemplative gaze. By contrast, the definition of a good frame is almost exactly the opposite; it should be immediately absorbed without any period of consideration and, rather than being the focus of attention in itself, should direct our attention to the object within it. In short, the frame enhances, but it is not itself, the subject of attention. What is crucial to this argument, if extended a little beyond Gombrich's own assessment, is that the frame's anonymous and modest presence belies its significance for the appreciation of the work of art. It might be suggested that it is only through the presence of the frame that we recognise the work of art for what it is, perceiving it and responding to it in the appropriate way. In short, it is the frame rather than the picture which establishes the mode of appreciation we know as art. Placed in another context, such as the billboard, the work of art might well fail to attract either attention or interest. Where the conventional wooden frame is inappropriate, as in many forms of modern art, the gallery itself provides the larger frame which is an index of its contents" (Miller 1993: 100-1).

This quotation encapsulates a number of significant issues which we have discussed previously. The 'abstract and contemplative gaze' directed at the painting involves both practical and discursive knowledge, the perception of a non-linear, non-sequential form and the formulation of a discursive appreciation which can be communicated to others. The frame is also 'absorbed' through practical understanding, we acknowledge it while ignoring it on a discursive level, it orientates our attention to its fellow artefact, the painting. Therefore, the painting, the frame and the relationship between the two all play a part in our experience. The art critic, or anyone confronting the

picture, is, therefore, involved in a number of reciprocal relations with artefacts which combine to form a complex set of circumstances. All our associations with artefacts involve a similar level of complexity, yet because of the ways in which we are able to deal with them, through our capacity to apply different forms of understanding, these intricate correlative ties rarely ever become manifest.

That it is a reciprocal relationship cannot be stressed enough, a point discussed at some length when we looked at the notion of objectification. Under certain circumstances, through a process of externalisation and sublation, humanity can be seen to be involved in an act of self-development, the artefact acting as a material device in this operation. Thus, in Scarry's work,

"the artefact is ... called a 'lever' or 'fulcrum' in order to underscore that it is itself only a midpoint in a total action: the act of human creating includes both the creating of the object and the object's recreating of the human being, and it is only because of the second that the first is undertaken: that 'recreating' action is accomplished by the human makers and must be included in any account of the phenomenon of making. What the human maker projects into the made object may change from object to object (as a counterfactual perception about seeing is projected into the telescope while a counterfactual perception about skin is projected into the bandage), but what he or she will have always projected there is the power of creating itself: the object (coat, telescope, bandage) is invested with the power of creating and exists only to complete this task of recreating us (making us warm, extending vision, replacing absent skin with a present skin). It is precisely because

objects routinely act to recreate us that the confusion arises in which the object is seen as a *freestanding* creator” (Scarry 1987: 310).

While noting the dangers of slipping into a reification of the object, for the most part such a possibility goes unnoticed by the vast majority of us; artefacts help in, if not our ‘recreation’, the reproduction or transformation of ourselves as social beings.

Conclusion

The impact of artefacts on our lives, artefacts as active participants in our daily existence, goes largely unrecognised by laypersons and academics alike. It was the aim of this chapter to highlight and explain the ways in which artefacts play a dynamic role in our relations with them, how they cannot be viewed simply as pieces of dead matter with which we deal purely on our own terms. Material culture must be acknowledged as possessing the potential to affect our activity in the world, it can ‘tell us how to behave’. As Scarry emphasises, this is in no small part due to the artefact being an embodiment of ‘knowingness’, what we have described as the three forms of knowledge. It is this aspect of material culture which distinguishes it fundamentally from natural objects; whereas meanings can and are given to the latter, the former possess meaning from the very moment of its inception because it is the outcome of meaningful behaviour. Therefore, any further meanings applied to the artefact, however diverse they may be, owe something to the original knowledge present during

the products creation - there can be no escaping these original meanings because they are present in the very constitution of the object; natural objects, on the other hand, carry no constitutive meanings as they are not created through human agency. Therefore, with respect to human products, our understanding of them is affected on two levels, both by the knowledgeable activity of their makers and by the attentions of subsequent 'interpreters'; it is only this last factor which is relevant to natural objects.

However, with the distribution of objects the situation is less clear-cut, because, obviously, both natural and artificial objects can be positioned by us - there appears no pronounced distinction in the process of placing furniture around a house and the laying out of plants and shrubs in a garden, both are knowledgeable activities, both can embody socio-cultural practices. Yet we can argue for a differentiation based on the twofold character of the artefact's meaningfulness; if the materialised knowledge of the artefact's maker impacts upon subsequent meanings then this is likely to affect the context in which it will be placed.

What needs to be kept in mind is that both in the production and subsequent encounters with artefacts up to three forms of knowledge may be applied; our understanding of them can thus take on various forms all of which are affected by the artefact itself. Our relationships with material culture cannot, therefore, be seen as straightforward, they are, in fact, extremely complex. However, far from viewing this situation as one which stands in the way of any significant investigation, new

opportunities towards understanding our interactions with artefacts emerge and a few of these will be discussed in the following chapter. Yet, for the most part, such relations with material culture go relatively unnoticed, we are unaware that these associations exist; the humility of artefacts is thus ensured.

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Conclusion

Back to the beginning

Finally, let's try and locate our scheme within a broader philosophical context. Turning full circle, how does it relate to Popper's ontological theory discussed at the very beginning of this study; specifically, what affinity does it have to his notion of three distinct worlds? Most obviously it appears that artefacts make up part of what Popper terms world 3:1, "the materialised, the stored-up part of world 3" (Popper 1974: 1050); knowledge that, once formulated and made sensuous, can exist apart from its producers, thus becoming "*knowledge without a knower: ... knowledge without a knowing subject*" (Popper 1992: 109). This is an important aspect of artefacts which we have emphasised in the preceding chapters, artefacts as physical objects have the capacity to exist apart from their makers, possibly for thousands of years. But what of the nature of the knowledge embedded in the artefact, how does this correspond to Popper's ideas?

It may be recalled that for him world 3 is distinguished by its logical content and, though this is less clear from his writings, by its expression in linguistic form; however,

both of these characteristics present problems to any alignment of Popper's work with our own scheme. With respect to the latter attribute, as we noted at the time, his work exhibits some uncertainty over the role played by language. Nevertheless, for the most part objective knowledge is intrinsically tied to language, language is necessary for both the transformation of subjective knowledge into its objective counterpart and for its 'evolution' through description and argument. Yet, as we have explained at length, language does not constitute a boundary beyond which knowledge cannot exist or can exist but only on a purely subjective level. Obviously meaning can occur in and between artefacts on a level open to linguistic formulation, but it can also exist in both practical and embodied forms, forms that are either difficult or impossible to express adequately in discursive terms.

Neither can practical and embodied knowledge be relegated to Popper's second division (world 2), because they cannot be understood as merely "states of consciousness, ... mental states, or perhaps ... behavioural dispositions to act" (ibid: 106). Embodied knowledge in particular must be seen as a form of understanding which transcends Popper's Cartesian notion of the subject, it is an aspect of the person as a whole as Merleau-Ponty is at pains to stress. Yet embodied knowledge is also non-subjective in another sense for it also transcends the individual, having an essentially social character. Embodied knowledge is socially acquired, most often the result of the inculcation of culturally prescribed ways of acting via imitation and repetition. Furthermore, in the case of artefacts we are dealing with objects which are

themselves socially constituted, both in the sense that they are objectified social activity and that they are formed through the activity of other socially constituted objects, tools; thus other trans-individual elements comes into play when we interact with them.

The difficulty of translating certain forms of knowledge into language also brings about problems when we try to determine their logical content. According to Popper, at any one moment in time there exists a single world 3 made up of all extant intelligibilia. For this to compose a single entity all such items must share at least one characteristic, they must possess the potential to be expressed in a common language in order that their propositional content can be acknowledged and, consequently, the logical relations between them may be assessed. With respect to artefacts, as Archer writes, "the relevant proposition is the relation asserted to hold between them or their parts, since sense experience alone never yields knowledge without reflective analysis, entailing language, of what we are experiencing. For knowledge is knowledge of propositions and can only be known by discriminating between abstract features which are aspects of the ... object" (Archer 1989: 320). However, as we have noted with respect to embodied knowledge in particular, sense experiences can yield knowledge without reflective analysis of a discursive nature; new knowledge and adaptations of previously held knowledge can occur quite apart from any linguistic process. This is, of course, not to deny that such propositions can be made, that relations between artefacts or their parts can be asserted, (we have noted a number of such cases

recently), yet they cannot by themselves constitute all aspects of our knowledge of an artefact.

Mark Johnson appears to hold a similar view, arguing that

“it is crucially important to see that balancing is an *activity we learn with our bodies* and not by grasping a set of rules or concepts. First and foremost, balancing is something we *do*. The baby stands, wobbles, and drops to the floor. It tries again, and again, and again, until a new world opens up - the world of the balanced erect posture. There are those few days when the synapse connections are being established and then, fairly suddenly, the baby becomes a little *homo erectus*. Balancing is a preconceptual bodily activity that cannot be described propositionally by rules. As Michael Polanyi has argued, you cannot tell another what steps to take to achieve the balanced riding of a bicycle [see Polanyi 1973: 49-50]. One can give the beginner a few more or less empty rules, but the balancing activity happens when the rules, such as they are, no longer play any role. For example, in learning the proper balance of forces for juggling, I might be told to throw the ball in the hand *under* the closest ball in the air, just as it reaches the peak of its trajectory. But the conscious following of rules is an impediment to balancing the forces in juggling. Instead, the juggler knows when the balance is right, knows how to make adjustments, and ‘has a feel’ for the patterns of bodily movement that generate the proper patterns of the balls in motion” (Johnson 1992: 74-5).

Yet things may be even more complicated for one cannot make a simple distinction between artefacts and language based on their openness to propositional formulation; a general

“difficulty arises”, explains Miller, “when trying to assess how far different media may be taken as propositional. That this cannot be assumed of language, which appears to serve such a purpose, has been illustrated very clearly by the linguist Lehrer in an analysis of the language used in the description of wines. Through her experiments it became evident that, despite the extensive elaboration of wine descriptors and the beliefs of the participants, neither lay persons nor experts were actually communicating knowledge about wines to their fellows in conversation, such that the wine referred to could be recognised from linguistic description alone. By contrast, many studies of objects such as buildings, which discuss the links between architectural forms and a set of ideals such as scholasticism or imperialism, indicate the degree to which such objects are significant as propositional forms, even as to the nature of the world” (Miller 1993: 98).

Ultimately, we must accept that language is neither a sufficient nor a necessary condition for our understanding of human products and that, overall, Popper’s realist approach does not offer an adequate philosophical framework within which we can place our own ideas on material culture, it cannot accommodate important aspects of our scheme.

A more satisfactory theoretical structure appears to be provided by Bhaskar's critical realist model. At the core of his work lies a denial of what he terms the 'epistemic fallacy', the mistaken conjunction of being (ontology) and knowledge of being (epistemology), for "it does not follow from the fact that we can only know in knowledge that we can only know knowledge" (Bhaskar 1989: 26). As Shotter elucidates;

"while our *knowledge* of the world is a social product, produced by transformational social activity from previously existing knowledge, the *being* of the world must be conceived of (at least at the moment of its scientific investigation) as existing independently of our thoughts about it. For only if this is so, can we discover our theories of its nature, thus making a scientific investigation of its *reality* be a genuine possibility" (Shotter 1990: 444).

Critical realism can, therefore, be seen to tread a middle path between positivism and constructivism, drawing upon aspects of both while simultaneously rejecting their overall assertions. Consequently, in Gosden's words,

"for realists the world exists independently of us and we can only attempt to understand the nature of the world's existence. However, we never apprehend the world as objective observers, as positivists claim that we can, but as beings involved both in the world and in social relations. Involvement sparks interest in some aspects of the world and not in others; it also provides us with particular forms of knowledge and modes of talking about reality. Although the world exists, we can

never know it objectively, as it is. We always work from positions of interest determined by social and historical relations. However, our positions of interest are not the sole determinant of knowledge, as is the constructivist view ... For realists, the structure of the world limits what we can say, but these limits are determined not just by reality but also by our forms of knowing and telling. Knowledge through involvement in a material reality is the key to realism" (Gosden 1994: 10-11).

Material culture constitutes a vital element of our material reality, through our activity in the world we both influence and are influenced by physical objects in general and artefacts in particular. As Gosden goes on to emphasise, "material things are at once the product of human action and productive of further action. We are socialised into various material settings. Buildings, rooms and furniture tell us how to behave towards each other and to them as material things. The clues we get from the material world are not so much something we know, as something we are" (ibid: 11). Perceiving material culture in this way it presents certain difficulties for a number of traditional dichotomies, most obviously that of materialism/idealism. Material culture does not sit easily on either side of this split for it is concurrently both material and ideal, the materialisation of the ideal, the idealisation of the material. In respect to semiology the artefact plays havoc with the distinction between abstract signifiers and concrete signifieds, because it can function simultaneously on both levels. Through our everyday use of artefacts major difficulties surface for those seeking to endorse a notion of mind/body dualism due to the presence of embodied knowledge.

These are some of the implications which flow from the study of material culture and others have been noted throughout this inquiry. So wide-ranging are they that disciplines as diverse as anthropology, aesthetics, archaeology, semiology, psychology, and sociology are directly affected. Therefore, before finishing, let's highlight a few important consequences which are relevant to a number of these subjects. Some of them have expended a great deal of time and energy discussing the problems surrounding the question of translating beliefs, faiths and ideologies from one culture to another, problems which have arisen due mainly to the application of a version of Wittgenstein's notion of language games, (the works of Peter Winch and Barnes and Bloor are probably the best known in this field). What these theorists are predominantly concerned with is in essence knowledge of a discursive form and, in particular, what they perceive as the incommensurability between distinct linguistic cultures. Now, we can observe, due to certain factors which have emerged from our own study, that this stance is far from problem free. First of all it is based on a limited perspective, because it concerns itself only with discursive knowledge while ignoring both practical and embodied forms. Surely differences between cultures can also exist on all three levels, a fact that Mauss noticed with respect to embodied knowledge in the use of spades by English and French soldiers. However, it could be argued that practical and embodied knowledge are just two other ways in which discursive knowledge is held, merely reflected forms of discursive knowledge, so that incommensurability itself exists on all three levels. This being the case it would, for example, be extremely difficult for us to acquire the skill of using a Zulu hand loom or

a French spade for that matter. If this happened to be so, would it be because of an incommensurability between different forms of practical and embodied knowledge or because of incompetence and cack-handedness on our behalf? Yet if we do become skilful at working with an 'alien' tool does this therefore mean that we can understand another culture on both the practical and embodied levels, but not at the discursive level - can incommensurability exist in one form of understanding, but not in the other two within the same individual? Commonsensically this seems unlikely and, as we have discussed previously, although the three types of knowledge are analytically distinct they impact upon and influence each other. Therefore, understanding on one level implies understanding on the other two even if it is of the most cursory nature.

Similar questions can also be raised in relation to discrete 'worlds' existing within a *single* culture. A number of theorists, most notably Thomas Kuhn, argue that scientific disciplines are prone to experience violent theoretical revolutions, paradigm shifts, where a whole conceptual outlook is rejected and replaced by a completely different one. So dramatic is this change that a new world seems to open up for the scientist and, concomitantly, no comparison is possible between it and the old order such is their utter contrariety. However, here again we see priority given to discursive knowledge, it is this that undergoes a radical change. But what of changes to practical and embodied knowledge, do these alter at exactly the same time and in such an impressive way; if so, how? Also, what role does the artefact play in this process, are scientific implements only passive items exerting no influence on the situation?

The implications that follow on from this study can, therefore, be seen to pose serious problems for any theory which promotes incommensurability between cultures. Yet it does so in a positive way, because it opens up the possibility that understandings can be gained on a number of levels. Furthermore, even in the absence of those people of which we hope to obtain information the artefact can provide us with a route to comprehending their world, such are the practical implications which emerge from this study. Yet there is still a long way to go. As Hodder points out with respect to archaeology;

“we are still far from understanding how the making of a stone tool or ceramic pot can be both mechanism and metaphor for disciplining the human body into a cultural mould. We are still far from understanding how knowledge about striking blades and flakes from flint nodules is organised, learnt and adapted. And we are far from understanding how, for example, the shift from knapping flint flakes to blades might be related, in particular social and cultural contexts, to a new bodily discipline and a new political philosophy ... [W]e need to have the confidence to delve into the practical world of technological operations in order to build theories about the embodiment of meanings and thus about the relationship between material practice and conceptual structure” (Hodder 1995: 211).

The same could be said of all the disciplines listed above; we have to come to a better understanding of how humanity *interacts* with the artefacts which it produces in order to gain a more comprehensive knowledge of our presence and activities in the world.

This being the case, it is time to move on from viewing artefacts as merely technological objects which help us to adapt to our environment, as functional tools, as purely reflections of human mentality, as texts, as congealed labour, as peripheral elements in everyday life - artefacts deserve to be addressed as fundamental physical aspects of social existence; hopefully this study has established why this should be so.

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